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ONTARIO GEOLOGICAL SURVEY

Open File Report 6063

Results of Modern Alluvium Sampling, Chapleau Area, Northeastern Ontario: Operation Treasure Hunt—Kapuskasing Structural Zone

by

Ontario Geological Survey

2001

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*Miscellaneous Release—Data 82

Results of Modern Alluvium Sampling, Chapleau Area, Northeastern Ontario: Operation Treasure Hunt—Kapuskasing Structural Zone; by the Ontario Geological Survey.

This release consists of data related to kimberlite indicator minerals (KIMs), metamorphosed magmatic/massive sulphide indicator minerals (MMSIMs®), carbonatite indicator minerals and gold grains recovered from modern alluvium samples collected in the Chapleau area, northeastern Ontario. The data are being released in conjunction with Open File Report 6063. Files on this release contain information on abbreviations used; sample site locations; KIM counts; microprobe data for KIMs (e.g., garnets, chromites, Mg-ilmenites, olivines, and pyroxenes); MMSIMs®; microprobe data for MMSIMs®, gahnite; carbonatite indicator minerals; and gold grains. Data is available as self-extracting zip files in ASCII (.txt) and Microsoft Excel (.xls) file format on one 3.5-inch MS-DOS diskette.

This diskette is available separately from the report.

Abstract

In 2000 the Ontario Geological Survey (OGS) completed a modern alluvium sampling study in the Chapleau area of northeastern Ontario to determine the presence of kimberlite indicator minerals (KIMs), metamorphic/magmatic massive sulphide indicator minerals (MMSIMs®) and gold grains. This study was carried out as part of the Operation Treasure Hunt (OTH) program. Results showed the presence of a number of indicator minerals commonly associated with kimberlite and base metal deposits.

A total of 1026 KIMs were recovered including: 3 "G10" Cr-pyrope garnet; 2 diamond inclusion field chromites; and 1 diamond intergrowth field chromite. Other KIMs recovered from the sampling program include: "G9" Cr-pyrope garnets; megacrystic garnets; eclogitic garnets; picro-ilmenites; kimberlitic Cr-diopsides; and forsteritic olivines. Samples collected from the southwestern part of the study area (south Batchawana) contained the most anomalous number of important KIMs including a "G10" Cr-pyrope garnet, all diamond inclusion and intergrowth field chromites, the majority of Cr-rich picro-ilmenites as well as other significant KIMs. This area is considered the most favourable for kimberlite exploration within the project area. Four other areas of importance are highlighted.

A number of metamorphic/magmatic massive sulphide indicator minerals were recovered, including 15 gahnites (polymetallic affinity) and numerous red rutiles. Both of these minerals are considered excellent indicators for potential metamorphosed/magmatic massive sulphide mineralization. The results presented herein show 4 regions within the study area that exhibit anomalous distributions of MMSIMs®. These are highlighted in the report.

Results of Modern Alluvium Sampling, Chapleau Area, Northeastern Ontario: Operation Treasure Hunt—Kapuskasing Structural Zone

Ontario Geological Survey[1]

Ontario Geological Survey
Open File Report 6063
2001

Compilation of data and written report by N.P. Tardif and D.C. Crabtree. Project supervision by C.L. Baker and R.D. Dyer. Review by C.L. Baker.

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Introduction

Modern alluvium sampling for heavy mineral indicator grains was carried out over the Kapuskasing Structural Zone (KSZ) during the summer of 2000 as part of the Operation Treasure Hunt (OTH) program (Figure 1). This project is one of several geoscience projects being completed under OTH.

Traditionally, the modern alluvium sampling program of the Ontario Geological Survey (OGS) has undertaken low to medium density sampling over structurally favorable shield terrain in Ontario in conjunction with Quaternary mapping. The OTH program over the KSZ involved medium density (approximately 1 sample per 30 km^2) sampling over an area of approximately 65 000 km^2. Approximately 2000 samples were collected and processed to isolate kimberlite indicator minerals, metamorphic/magmatic massive sulphide indicator minerals and gold grains. Results for the 507 modern alluvium samples collected in the Kapuskasing-Fraserdale area were released earlier this year (Figure 2) (Ontario Geological Survey 2001a). Contained in the current report are data and preliminary interpretation on the types and distribution of kimberlite indicator minerals (KIMs), metamorphic/magmatic massive sulphide indicator minerals (MMSIMs®)* and gold grains for the 556 modern alluvium samples collected from the 20 201 km^2 Chapleau section of the OTH sampling survey (Figure 3, back pocket) (Appendix A).

Previous studies indicate high potential for KIMs and MMSIMs® within the Kapuskasing Structural Zone (Wolfe et al. 1975; Bennett et al. 1967; Morris, Crabtree and Averill 1998; Stephenson et al. 1999; Sage 2000a). In 1997 and 1998, overburden mapping combined with till and modern alluvium sampling programs were initiated by the OGS over the KSZ south of Kapuskasing in the Woman Falls-Wakusimi River (Morris 1998; Morris, Crabtree and Averill 1998) and the Opasatika-Roche Lake areas (Stephenson et al. 1999; Stephenson 1999) (Figure 2). From 1994 to 1996, mapping, modern alluvium and soil sampling was also completed in the Wawa region, within the southern part of the KSZ (Figure 2)(Morris 1994a, 1994b, 1995a, 1995b, 1996a, 1996b, 1997a, 1997b, Morris et al. 1994, Morris, Crabtree and Pianosi 1997, Morris et al. 1998). For all of the studies, collected samples were analysed for MMSIMs®, KIMs and gold.

The objective of the present OTH study was to complete a program of modern alluvium sampling to further evaluate the mineral potential of the KSZ area. Sampling and analysis were designed to identify: 1) the presence of KIMs and MMSIMs®; and 2) the background values for gold within modern alluvium from the Chapleau area and determine whether anomalous values were present.

STUDY AREA

The study area for the OTH, KSZ modern alluvium sampling project extends from south of Chapleau to north of Fraserdale. This area has been divided into 4 sub-areas, namely the Chapleau, Foleyet, Kapuskasing-Fraserdale and the Coral Rapids areas (Figure 1). This report covers the Chapleau area, which is the most southern section of the sub-areas, located east of Lake Superior.

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*MMSIM is a registered trademark of Overburden Drilling Management Limited (ODM), Nepean, Ontario.

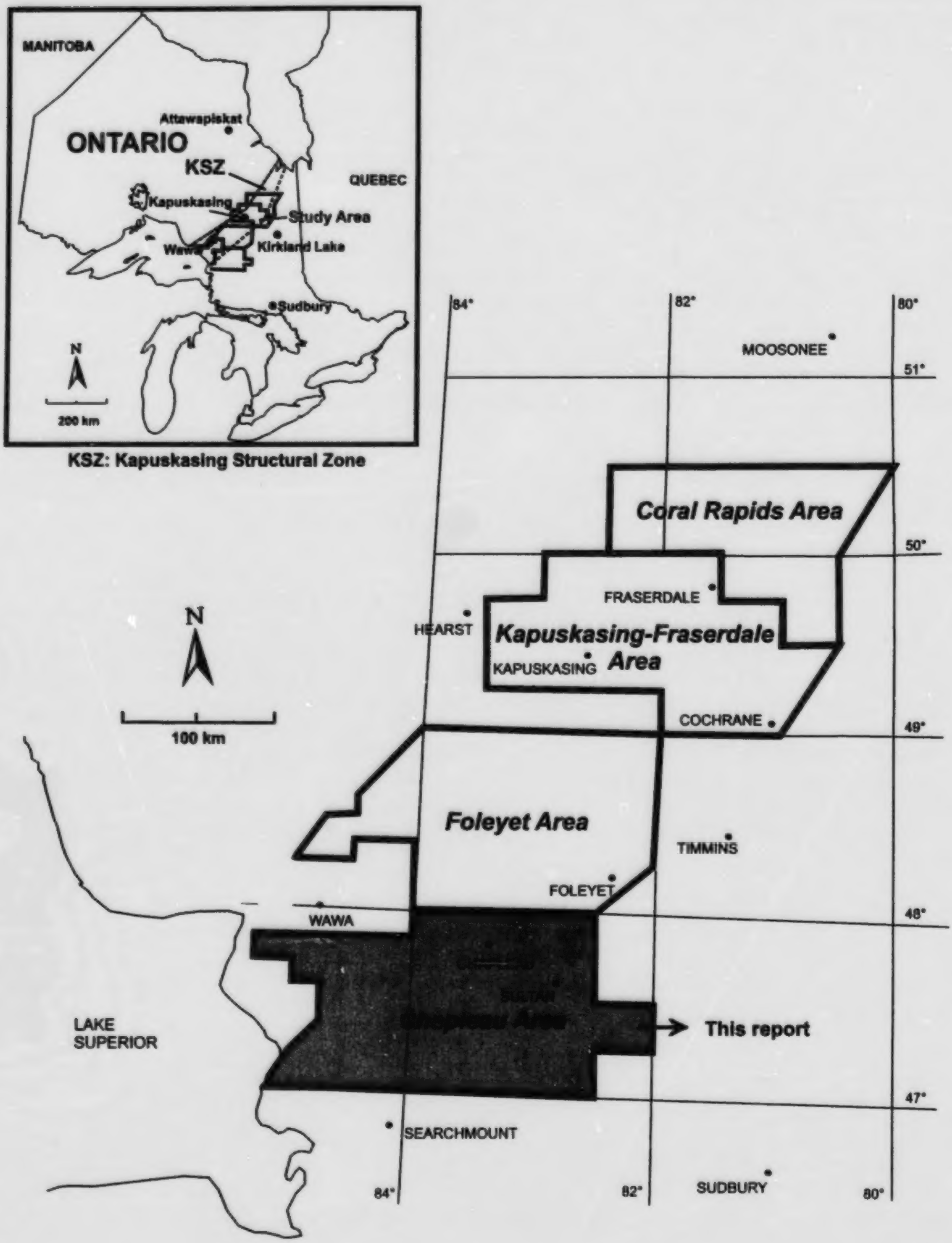
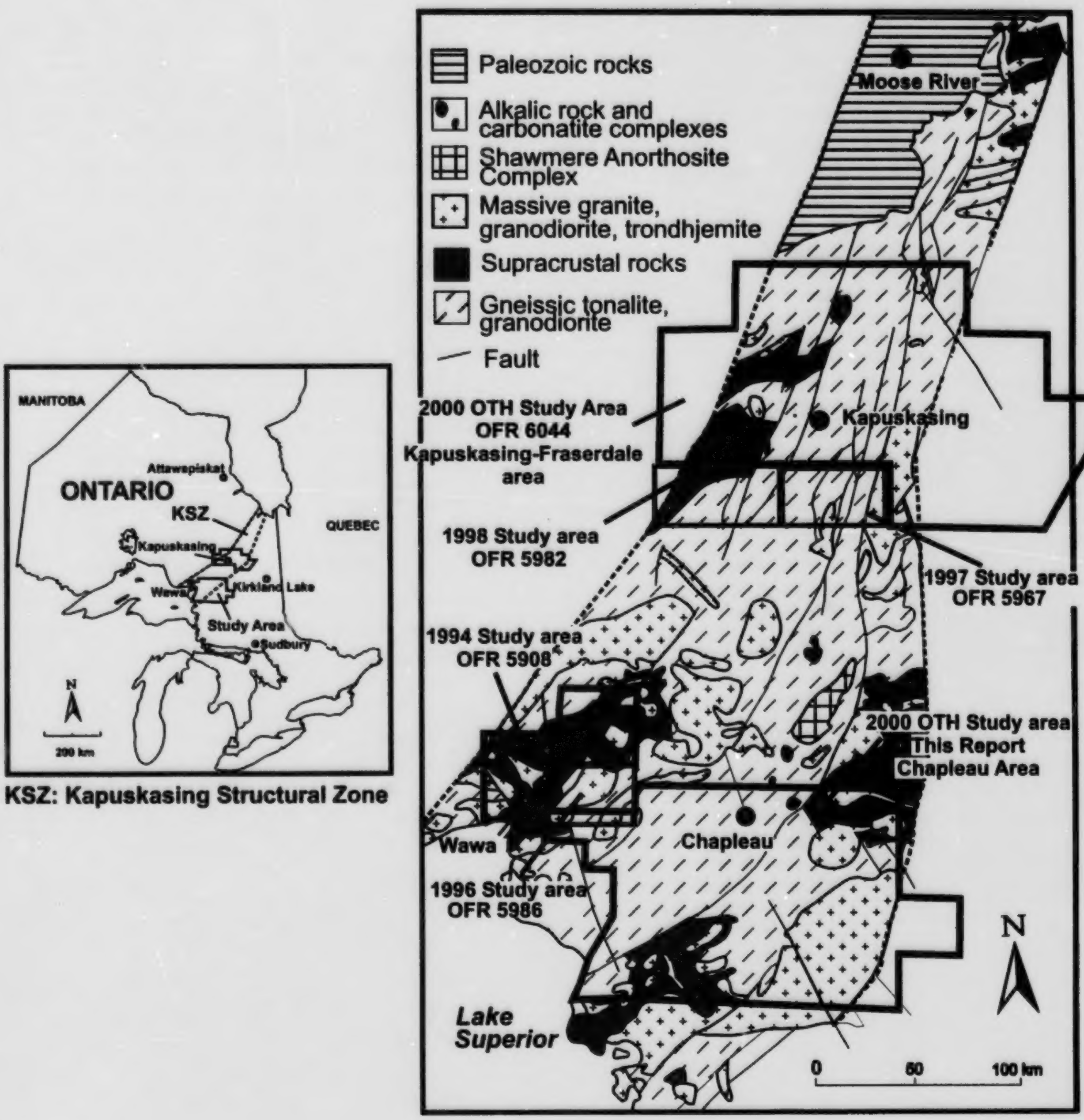

MANITOBA
Attawapiskat
ONTARIO
KSZ
QUEBEC
Kapuskasing
Study Area
Wawa
Kirkland Lake
Sudbury
N
200 km
KSZ: Kapuskasing Structural Zone
84°
82°
80°
MOOSONEE
51°
Coral Rapids Area
50°
FRASERDALE
HEARST
Kapuskasing-Fraserdale Area
KAPUSKASING
COCHRANE
49°
N
100 km
Foleyet Area
TIMMINS
FOLEYET
WAWA
48°
CHAPLEAU
SULTAN
Chapleau Area
This report
LAKE SUPERIOR
47°
SEARCHMOUNT
84°
82°
SUDBURY
80°

Figure 1: Location of the Operation Treasure Hunt, Kapuskasing Structural Zone, modern alluvium sampling project areas.


Paleozoic rocks
Alkalic rock and carbonatite complexes
Shawmere Anorthosite Complex
Massive granite, granodiorite, trondhjemite
Supracrustal rocks
Gneissic tonalite, granodiorite
Fault
Moose River
Kapuskasing
2000 OTH Study Area OFR 6044 Kapuskasing-Fraserdale area
1998 Study area OFR 5982
1997 Study area OFR 5967
1994 Study area OFR 5908
2000 OTH Study area This Report Chapleau Area
Wawa
Chapleau
1996 Study area OFR 5986
Lake Superior
N
0
50
100 km
MANITOBA
ONTARIO
Attawapiskat
KSZ
QUEBEC
Kapuskasing
Kirkland Lake
Wawa
Study Area
Sudbury
N
200 km

KSZ: Kapuskasing Structural Zone

Figure 2: Locations of the 1994, 1996, 1997, 1998 and 2000 sampling programs and the approximate location of the Kapuskasing Structural Zone (KSZ)(Modified from Sage 1991).

The Chapleau area is represented on 19, 1:50 000 scale National Topographic System (NTS) maps, namely: the Batchewana (41 N/1); Mamainse Point (41 N/2); Grey Owl Lake (41 N/8); Black Spruce Lake (41 N/9); Michipicoten River (41 N/15); Kinniwabi Lake (41 N/16), (41 O/2), (41 O/3); Welcome Lake (41 O/4), (41 O/5), (41 O/6); Wakami Lake (41 O/7); Biscotasing (41 O/8); Sultan (41 O/10); Nemegos (41 O/11); Grave Yard Lake (41 O/12); Nicholson (41 O/13); Chapleau (41 O/14); and Rollo Lake (41 O/15). The area is bounded by longitudes 84°75'W and 82°00'W and latitudes 48°00'N and 47°00'N (Figure 3, back pocket).

Access to the area is accomplished through a network of roads including, Highways 129, 101, 17 and a series of secondary roads. A helicopter, float plane and boat were used to access areas not covered by a road network.

PHYSIOGRAPHY

The study area is located in the Abitibi Upland physiographic region of Canada (Bostock 1976). Surface drainage flows south to the northern channel of Lake Huron in the southern part of the study area, west to Lake Superior in the western part of the study area, and north into Hudson Bay in the north-eastern part of the study area. Major river systems within the study area include: the Montreal; Goulais; Wenebegon; Woman; Wakami; Jackpine; and Agawa rivers (Figure 4). Bedrock features such as deformation zones structurally control the orientation of many major rivers and lakes within the area.

Regional Geology – Chapleau Study Area

The Chapleau study area covers the southern section of the Kapuskasing Structural Zone (KSZ), the eastern extention of the Wawa subprovince and the western extention of the Abitibi subprovince.

The KSZ is an elongate, 500 km, north to northeast trending structure transecting the Wawa (to the west) and Abitibi (to the east) subprovinces within the Superior Province. It is fault bounded on the southeast, however, the western contact is complex and gradational (Percival and Card 1985). The KSZ extends from the east shore of Lake Superior to James Bay and is characterised by positive gravity and aeromagnetic anomalies. It comprises high metamorphic grade granulite and amphibolite facies paragneiss, tonalitic gneiss and anorthosite-suite gneiss that occur along a moderately northwest dipping crustal-scale thrust fault attributed to an early Proterozoic event (Percival and McGrath 1986). Adjacent regions (the Wawa and Abitibi subprovinces) consist of low metamorphic grade metavolcanic-metasedimentary belts. The precise age of the KSZ is uncertain, however, supracrustal rocks have ages varying between 2550 and 2700 Ma reflecting deposition, intrusion, complex deformation, recrystallization and cooling during deep-crustal residence (Percival and West 1994).

The bedrock geology of the Chapleau sub-area is largely composed of gneissic tonalite and granitic intrusive rocks (Figure 4). Parts of 4 greenstone belts occur within the area, namely the: 1) Batchawana; 2) Gamitagama; 3) Michipicoten; and 4) Swayze greenstone belts (Figure 5). All greenstone belts in the study area are characterized by similar rock compositions; migmatized supracrustal rocks (of the Kapuskasing Structural Zone), tonalites and granodiorites, granitic rocks, mafic to felsic metavolcanic rocks, metasedimentary rocks and sedimentary rocks. However, migmatized supracrustal rocks are not observed within the Batchawana belt. Most of

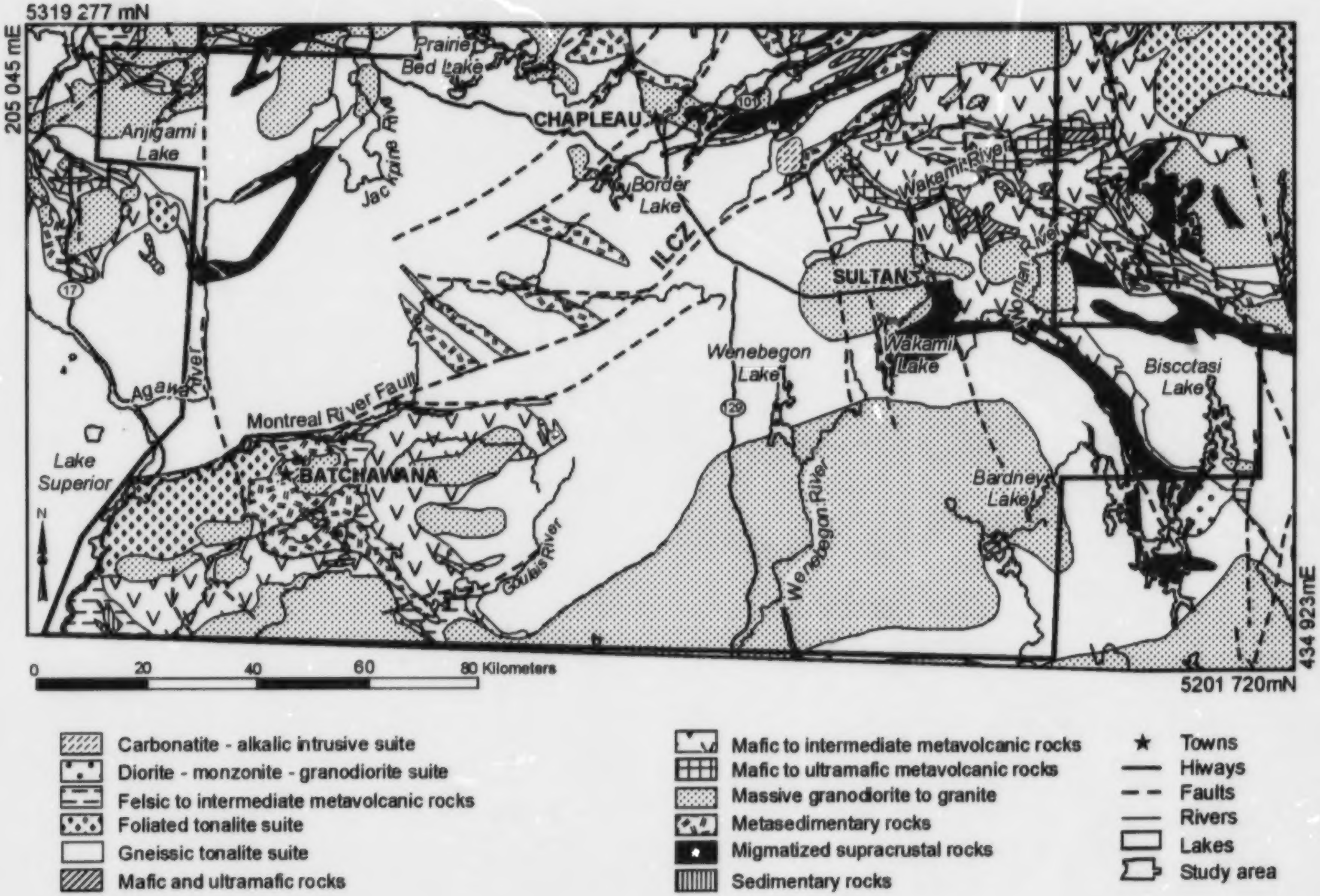

5319 277 mN
205 045 mE
Prairie Bed Lake
CHAPLEAU
101
Anjigami Lake
Jackpine River
Border Lake
ILCZ
17
SULTAN
Wakami River
Woman River
Wenebegon Lake
129
Wakami Lake
Biscotasi Lake
Agawa River
Montreal River Fault
Lake Superior
BATCHAWANA
Bardney Lake
Wenebegon River
Goulais River
N
434 923mE
5201 720mN
0
20
40
60
80 Kilometers
Carbonatite - alkalic intrusive suite
Diorite - monzonite - granodiorite suite
Felsic to intermediate metavolcanic rocks
Foliated tonalite suite
Gneissic tonalite suite
Mafic and ultramafic rocks
Mafic to intermediate metavolcanic rocks
Mafic to ultramafic metavolcanic rocks
Massive granodiorite to granite
Metasedimentary rocks
Migmatized supracrustal rocks
Sedimentary rocks
Towns
Hiways
Faults
Rivers
Lakes
Study area

Figure 4: Bedrock geology of the study area (Modified from Ontario Geological Survey 1991).

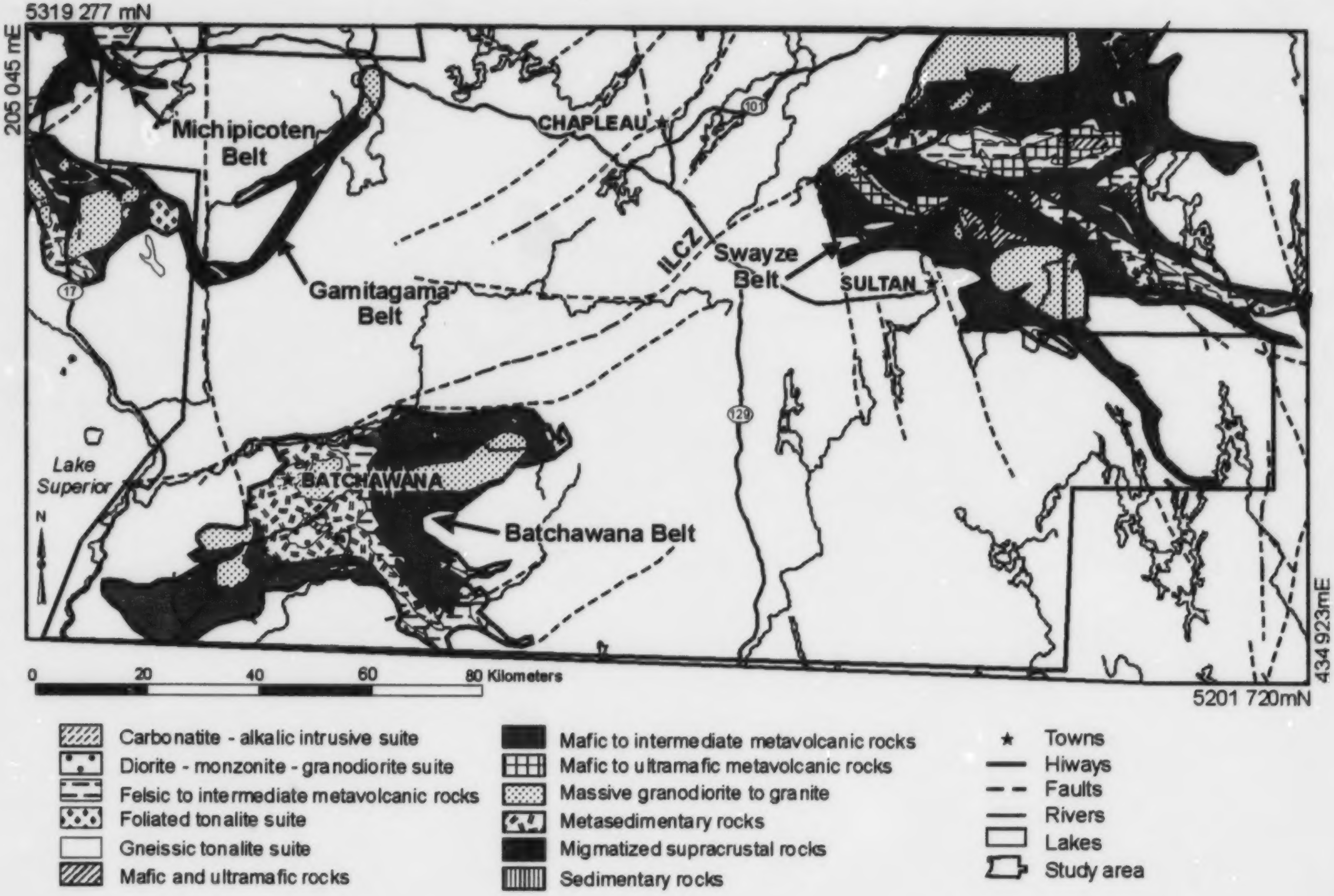

5319 277 mN
205 045 mE
Michipicoten Belt
Gamitagama Belt
CHAPLEAU
101
ILCZ
Swayze Belt
SULTAN
17
129
Lake Superior
N
BATCHAWANA
Batchawana Belt
434 923mE
5201 720mN
0
20
40
60
80 Kilometers
Carbonatite - alkalic intrusive suite
Diorite - monzonite - granodiorite suite
Felsic to intermediate metavolcanic rocks
Foliated tonalite suite
Gneissic tonalite suite
Mafic and ultramafic rocks
Mafic to intermediate metavolcanic rocks
Mafic to ultramafic metavolcanic rocks
Massive granodiorite to granite
Metasedimentary rocks
Migmatized supracrustal rocks
Sedimentary rocks
Towns
Hiways
Faults
Rivers
Lakes
Study area

Figure 5. The Michipicoten, Gamitagama, Swayze and Batchawana greenstone belts within the Chapleau study area (Modified from Ontario Geological Survey 1991).

the study area is controlled by a series of northeast and northwest oriented faults. The Ivanhoe Lake cataclastic zone (ILCZ) and the Montreal River Fault mark the southeastern contact of the Kapuskasing uplift (Figure 4). For a detailed description of major lithologic features and bedrock geology, the reader is referred to Thurston et al. (1974).

Prospecting activity for a variety of metals is common within the Chapleau area. Deposits and/or occurrences of gold, silver, zinc, nickel, copper, lead, iron, molybdenum, asbestos, talc, barite, marl and carbonatite associated rare earths and industrial minerals are present within the area and are reported in numerous assessment file reports.

PSEUDO-KIMBERLITES NORTH OF THE STUDY AREA

Pseudo-kimberlites are a group of rock compositions including: alnoites; carbonatites; and tuffisitic breccias that can appear similar to kimberlite (Sage 2000b). A number of non-diamond bearing pseudo-kimberlites exist in 2 areas of the James Bay Lowland located north of the study area. Mafic to ultramafic diatremes are observed in the areas: 1) north of Hearst; and 2) Sextant rapids. For further information on pseudo-kimberlites in these areas, the reader is referred to Sage (2000b).

ALKALIC ROCKS IN THE CHAPLEAU STUDY AREA

A Proterozoic magmatic event resulted in the emplacement of alkalic rocks (carbonatite complexes) and lamprophyre dikes, approximately 1022 to 1141 Ma ago, along the KSZ. (Sage 1991; Percival and Card 1985). Within the Chapleau area, 4 alkalic complexes are observed, namely: the Borden Township carbonatite complex (Bell et al. 1987, Sage 1987a); the Nemegosenda Lake alkalic complex (Sage 1987b, Bell and Blenkinsop 1980); the Seabrook Lake carbonatite complex (Sage 1988a); and the Lackner Lake alkalic complex (Sage 1988b) (Figure 4). The Borden, Nemegosenda, and Lackner complexes are located in the northern section of the Chapleau study area and the Seabrook Lake complex is located to the south. The carbonatite occurrences within the Kapuskasing Structural Zone all display close spatial relationships with major northeast-striking shear zones (Bennett et al. 1967).

Carbonatites are of economic interest since these complexes may be host to significant reserves of niobium in the form of pyrochlore mineralization. In addition to this, carbonatites also represent important sources of rare earth elements, thorium, iron, titanium, phosphorus and barium (Heinrich, 1966). Many carbonatite complexes also show traces of copper, however, only one major producer of copper in the world is hosted by a carbonatite complex (Phalaborwa, South Africa) (Evans 1993).

The Borden Township carbonatite complex is known to host phosphorous, niobium and uranium mineralization (Sage 1987a). The Nemegosenda Lake alkalic complex displays niobium mineralization and is characterised by other minerals commonly associated with alkalic complexes such as: aegirine and aegirine-augite, magnetite, apatite and rare earth minerals (Sage 1987b). The Lackner Lake complex is characterised by niobium, iron, phosphorous, and minor uranium and rare earth mineralization (Sage 1988b). The Seabrook Lake carbonatite complex, located in Maeck Township in the southern part of the study area, contains showings of niobium and rare earth mineralization (Sage 1988a).

Glacial Geology

As recently as 10 000 years ago, the study area was covered by the Laurentide ice sheet. Ice flow indicators, primarily striae and other linear ice flow features such as drumlins and crag and tail forms, show that the last glacial advance was generally southwest trending (Boissonneau 1968, Sado and Carswell 1987). An earlier ice advance to the southeast is also reported by Boissonneau (1966) and Bernier (1993, 1998).

Surficial mapping in the area has been completed at a regional scale (1:506 880) by Boissonneau (1965). More recently, the surficial geology for the area has been completed at a scale of 1:1 000 000 by Barnett (1992). The northeastern part of the study area was also mapped at a scale of 1:50 000 by Bernier (1993, 1998).

Surficial sediments within the area were deposited during the Late Wisconsinan glaciation. The most predominant surficial material in the Chapleau study area is a thin, discontinuous layer of silty to sandy till over bedrock with local morainic and outwash deposits. A narrow zone of lowlands extends along the shores of Lake Superior where gently rolling lacustrine deposits, outwash and bedrock predominate.

An extensive glaciolacustrine deposit (glacial Lake Sultan) occurs between the towns of Chapleau and Sultan. These sediments are composed of fine to gravely sand and clays. This glaciolacustrine deposit is intersected by ice-contact glaciofluvial sediments of the Chapleau moraine (Figure 6). The moraine consists of deep deposits of stony and bouldery sand and gravel, and probably marks a limit of local re-advance of the ice sheet (Boissonneau, 1968). Glaciofluvial outwash deposits including gravel and sand deposits of proglacial rivers and deltas occur sporadically through the area. Sinuous southwest trending eskers also predominate in the north and eastern parts of the study area.

Material Sampling

For this study, modern alluvium was chosen as the primary sampling medium as it is commonly used as a means of gaining a fast, relatively inexpensive heavy mineral signature for individual drainage basins. The heavy mineral signature obtained from modern alluvium is a product of the erosion of both bedrock and overburden, and the subsequent transportation and deposition of the eroded material. A more detailed discussion of the controls on these processes can be found in Morris (1995a), Morris and Kaszycki (1997) and Morris et al. (1994).

A private vendor under contract to the Ontario Geological Survey (OGS) carried out the field work and sampling for this survey. Standard OGS sampling methodologies were utilised (see Morris and Kaszycki 1997, Morris, Crabtree and Pianosi 1997, Stephenson et al. 1999) and OGS staff monitored adherence to these protocols. The samples were processed by Overburden Drilling Management (ODM) located in Nepean, Ontario. The microprobe work was completed at the Ontario Geoscience Laboratories (OGL) in Sudbury, Ontario.

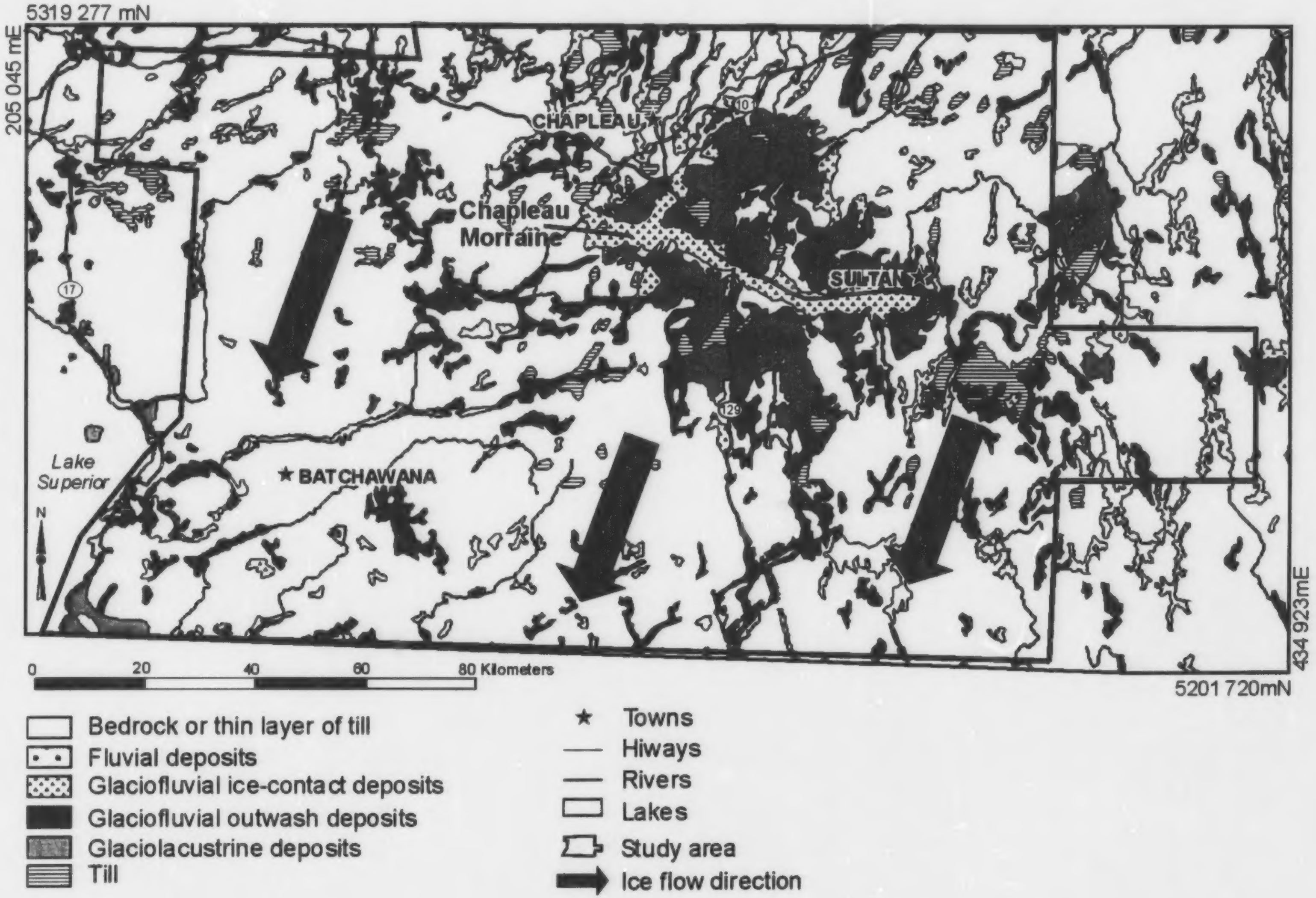

5319 277 mN
205 045 mE
CHAPLEAU
Chapleau
Morraine
SULTAN
101
129
17
Lake
Superior
BATCHAWANA
N
434 923mE
5201 720mN
0
20
40
60
80 Kilometers
Bedrock or thin layer of till
Fluvial deposits
Glaciofluvial ice-contact deposits
Glaciofluvial outwash deposits
Glaciolacustrine deposits
Till
Towns
Hiways
Rivers
Lakes
Study area
Ice flow direction

Figure 6. Quaternary geology of the Chapleau study area (modified from Barnett et al. 1991). Generalized ice flow direction is primarily from striae and other linear ice flow features such as drumlins and crag and tail forms (Boissonneau 1968, Sado and Carswell 1987)

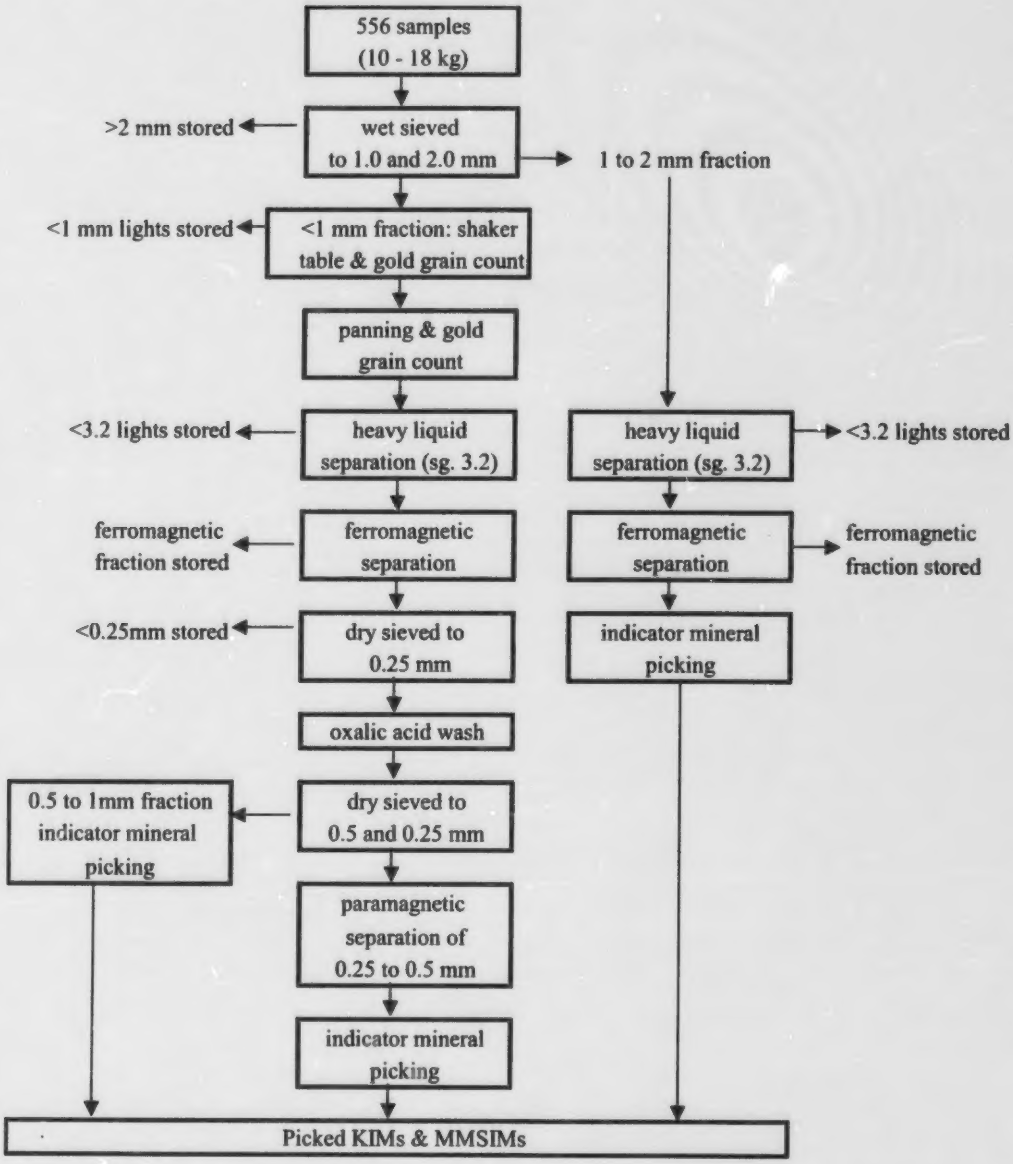

556 samples (10 - 18 kg)
>2 mm stored
wet sieved to 1.0 and 2.0 mm
1 to 2 mm fraction
<1 mm lights stored
<1 mm fraction: shaker table & gold grain count
panning & gold grain count
<3.2 lights stored
heavy liquid separation (sg. 3.2)
heavy liquid separation (sg. 3.2)
<3.2 lights stored
ferromagnetic fraction stored
ferromagnetic separation
ferromagnetic separation
ferromagnetic fraction stored
<0.25mm stored
dry sieved to 0.25 mm
indicator mineral picking
oxalic acid wash
0.5 to 1mm fraction indicator mineral picking
dry sieved to 0.5 and 0.25 mm
paramagnetic separation of 0.25 to 0.5 mm
indicator mineral picking
Picked KIMs & MMSIMs

Figure 7: Heavy mineral sample processing flow chart. (Modified from Averill 1998.)

Heavy Mineral Recovery and Identification

A total of 556 samples collected from the Chapleau area were submitted for heavy mineral concentrate analysis. Samples were processed for gold grain, KIM, and MMSIM® content as indicated in Figure 7.

In the lab, the 10 to 18 kg field samples were disaggregated (if needed), and sieved to remove the +10 mesh (+2 mm) size fraction. The entire –10 mesh size fraction was then passed across a shaker table twice to produce a rough heavy mineral concentrate. Samples, in which a pre-determined number of gold grains were seen during shaker table processing, had the heavy mineral (table) concentrate refined by hand or mechanical panning to concentrate all contained gold grains and associated pathfinder minerals. Following panning (if required), the tabled heavy mineral separates underwent a heavy liquid separation. The specific gravity of the heavy liquid used during this procedure is 3.2. Following heavy liquid separation the >3.2 S.G. magnetic minerals were separated using an auto-magnet. The paramagnetic fractions (weakly, moderately, strongly and non-paramagnetic fractions) were isolated using appropriate methodology. The final heavy mineral concentrate (HMC) was sieved to obtain 4 size fractions (<0.25, 0.25-0.5, 0.5-1.0 and 1.0-2.0 mm), each of which were weighed and placed in vials. Indicator mineral picking was then performed on the 0.25-0.5, 0.5-1.0 and 1.0-2.0 mm size fractions (Appendix B). A scanning electron microscope was then used to confirm/check any questionable picked grains and to determine the geochemistry of the grains (Dyer 2000). Microprobe analysis was then performed on all of the picked kimberlite indicator mineral grains.

Kimberlite and Diamond Potential of the Study Area

To date, 2 areas within northeastern Ontario have been shown to host kimberlite. These areas are: 1) the Kirkland Lake-Cobalt area; and 2) the Attawapiskat and Missisa Lake regions in the James Bay Lowland. The results of exploration programs in the KSZ have also documented the occurrence of kimberlite in the Wawa region. Kimberlite pipes in these areas are deeply weathered and covered with glacial sediments and more recent deposits. Kimberlite indicator minerals have also been recovered in numerous areas of Ontario including the Wawa region (Morris 1994a, 1994b, 1995a, 1995b, 1996a, 1996b, 1997a, 1997b; Morris et al. 1994; Morris, Crabtree and Pianosi 1997; Morris et al. 1998), perhaps in association with the northeast trending KSZ (Sage 1996).

Certain geologic and geotectonic characteristics defined by Helmstaedt and Gurney (1995) and Helmstaedt and Shultze (1995) make the study area an attractive region for diamond exploration. First, the Archean-aged Superior Province and the KSZ are restricted to ancient cratons where the low-density peridotitic root remains insulated against re-heating and excessive tectonic reworking. Secondly, the adherence of the root to the craton during subsequent plate motions allows for diamond preservation within subsidiary structures associated with major tectonic events and/or geophysical anomalies (Coopersmith 1993). Finally, Ontario kimberlites tend to occur in clusters along northwest trending structures of approximately 325° and at points where northwest-trending structures are crossed obliquely by faults, lineaments and major lithologic breaks (Sage 1996).

Data Plotting Parameters

The proportional dot diagrams in this report illustrate the relative abundance of indicator minerals and their locations throughout the study area. These diagrams are based on statistics that involve calculating percentiles. The largest dots on the diagrams represent sites having indicator mineral concentrations with values greater than the 95th percentile.

Tables and appendices for this study demonstrate the data as "raw data" and/or "normalized data". For this report, "raw data" refers to the actual number of grains picked from each sample whereas "normalized data" refers to a calculated value where data was normalized by table weight feed against 15 kg and/or an estimated number of grains for certain minerals (see Appendix H). The proportional dot diagrams in the body of text of this study, display the results as raw data. For normalized data, the reader is referred to Appendices C and E.

Caution must be taken when observing anomalous sites (represented by large dots) on the proportional dot diagrams. Samples collected for this study were very variable in texture. Different amounts of clay/silt, sand and gravel were present within each sample. Because the sand size fraction is the most favourable for KIM recovery, samples containing large amounts of finer material do not contain many KIMs. However, these samples were included in the calculation of percentiles for determining anomalous values of KIMs in this study. The addition of these samples may have resulted in false anomalies. It is important to cross check anomalies in the Appendices with the type and number of KIMs present at each sample site. Only then is it possible to determine which areas warrant further exploration. This was also the case in the Kapuskasing-Fraserdale area of the Operation Treasure Hunt program. However, recommended sites are not solely based on "large dots" but on the type and abundance of KIMs in these areas.

Kimberlite Indicator Minerals

The search for diamond-bearing kimberlite pipes using indicator minerals commonly begins with the location and definition of indicator mineral dispersion patterns (Sage 1996). KIMs are a suite of heavy minerals related to kimberlite or lamproite, potential host rocks for diamonds. KIMs found within surficial materials, such as tills, soils or modern alluvium, can be used to trace the indicators up-stream and/or up-ice to a bedrock source.

A full investigation of kimberlite indicator minerals should be completed because kimberlites can be missed if prospecting focuses only on certain indicator mineral grains (Sage 2000b). Therefore, one should look at: 1) strong KIM signatures; 2) the presence of more than one KIM type; 3) mineral characteristics such as shape, mineral inclusions and elemental content; and 4) the characteristics of the surrounding region from where the anomaly occurs (e.g., whether any major faults intersect in the region or if there are significant aeromagnetic anomalies or "bull's eyes" in the area).

In general, garnet, chromite and ilmenite are good indicator minerals for use in modern alluvium surveys because they travel well, are resistant to weathering and may have chemical compositions exclusive to kimberlite (Sage 1996). In contrast, olivine and phlogopite are poor indicator minerals because they weather quickly, are not durable in transport and do not have compositions exclusive to kimberlite (Sage 1996). However, the latter minerals can be useful in diamond exploration particularly when found in conjunction with other indicator minerals.

INDICATOR MINERALS

Common kimberlite indicator minerals found within the Chapleau study area include peridotitic Cr-pyrope garnets, megacrystic Cr-poor pyrope garnets, crustal eclogitic pyrope-almandine garnets, Cr-diopsides, Mg-rich ilmenites, chromites and forsteritic olivines. Summary statistics for all KIMs are recorded in Appendix C. Geochemistry for all KIM grains is recorded in Appendix D, Miscellaneous Data Release 82 (Ontario Geological Survey 2001b). This data is available as a separate digital file.

GARNET

Garnets occur in many types of peridotites but the most important are harzburgite and lherzolite (Stephenson et al. 1999). Commonly, most garnets from harzburgite peridotites ("G10" garnets) are associated with diamonds and are characterized by Ca depletion and Cr enrichment (Gurney 1984). This strong association of harzburgitic "G10" garnets with diamonds suggests that these grains are more important than "G9" garnets of lherzolitic origin (Dawson and Stephens 1975).

Eclogitic garnets are KIMs that can be classified as originating from group I (diamondiferous) or group II (non-diamondiferous) eclogites. Kimberlitic eclogitic garnets are typically Cr-poor and range from pyrope to almandine-pyrope in composition (Stephenson et al. 1999). Diamondiferous eclogitic garnets have Na_2O concentrations greater than 0.07% (Fipke et al. 1995) in conjunction with generally low TiO_2 values. Eclogitic garnets with low Na concentrations are not commonly associated with diamonds but may be useful indicators if found with other KIMs (Stephenson et al. 1999). Garnets containing higher TiO_2 values (>0.4 wt%) in conjunction with low Na values and low levels of Cr (<2 wt%) are of the megacrystic suite. The megacryst or "discrete nodule" suite of garnets are believed to be high-pressure cognate (magmatic) phases crystallized from primitive kimberlitic melts (Mitchell 1986).

Microprobe analysis of 68 garnet grains submitted to the Geoscience Laboratories revealed the presence of 53 "G9" and 3 "G10" Cr-pyrope garnets of peridotitic origin (Figure 8a). The line distinguishing "G9" from "G10" garnets on the Cr_2O_3 vs. CaO wt% diagram is referred to as the 85% line by Fipke et al. (1995). All grains plotting within the 15% marginal error zones (indicated by the dotted line) must be considered with caution. Two of the "G10" garnet grains recovered in this study plot beyond the 15% line, and 1 plots within the marginal error zone. Of the 53 "G9" Cr-pyrope garnets recovered, most plot well away from the 85% line which is not consistent with KIM compositions found in known kimberlites of the Attawapiskat region, located north of the study area (Sage 2000b). The pattern better resembles garnet compositions of pseudo-kimberlites from the Hearst and Sextant Rapids areas. Nevertheless, all "G9" garnets were included in the KIM dataset because some grains may still have kimberlitic compositions. The remaining 12 garnet grains classified as group II eclogitic garnets (9 grains) and megacrystic garnets (3 grains) when plotted on Fipke et al.'s (1995) TiO_2 vs. Na_2O diagram (Figure 8b).

Other grains identified in this study include almandine, uvarovite and grossular garnet. These are not likely associated with kimberlite and are of little interest to kimberlite exploration. Summary statistics and mineral chemistry for all garnet grains are listed in Appendix C and Appendix D (MRD 82, Ontario Geological Survey 2001b).

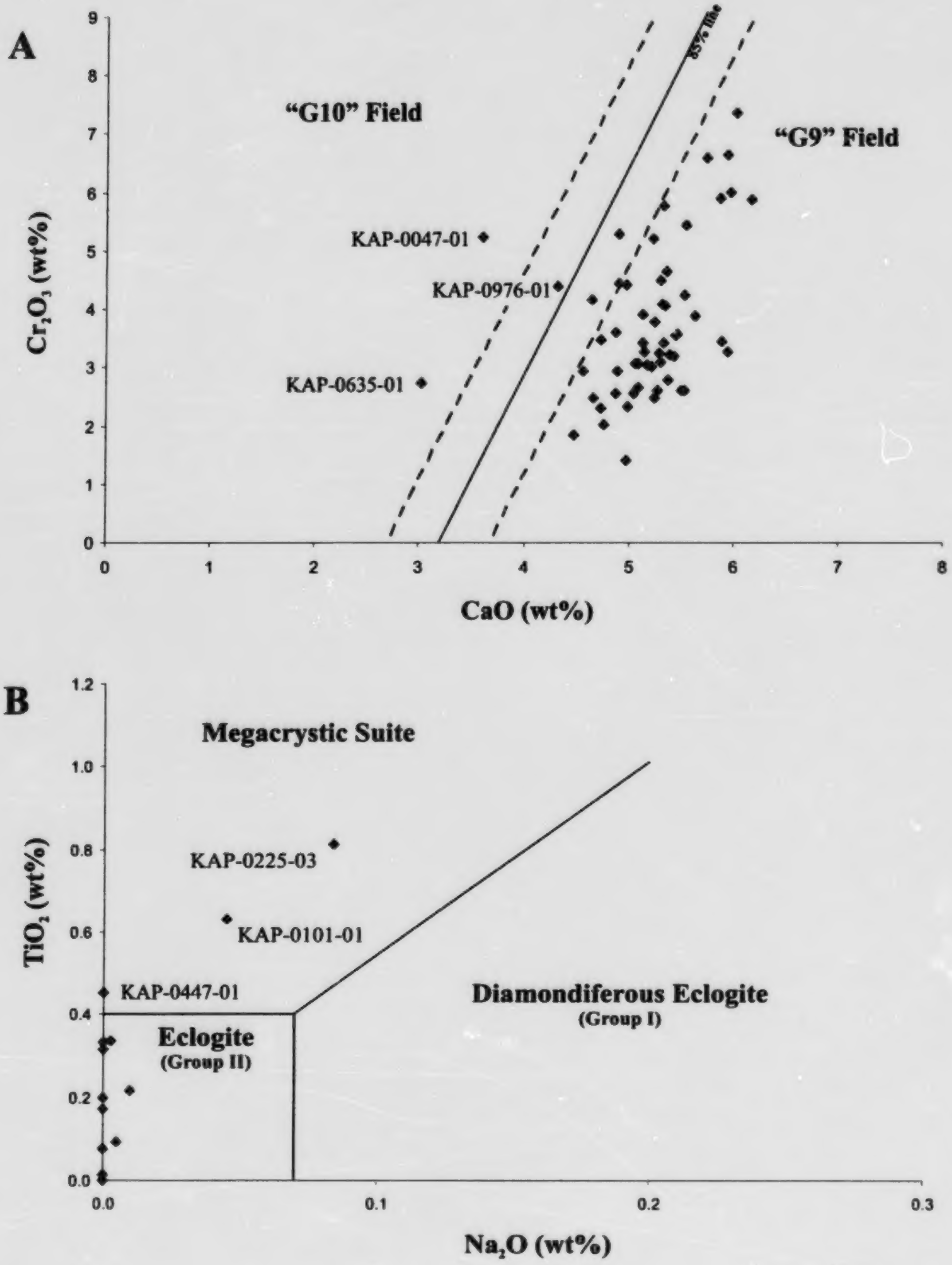
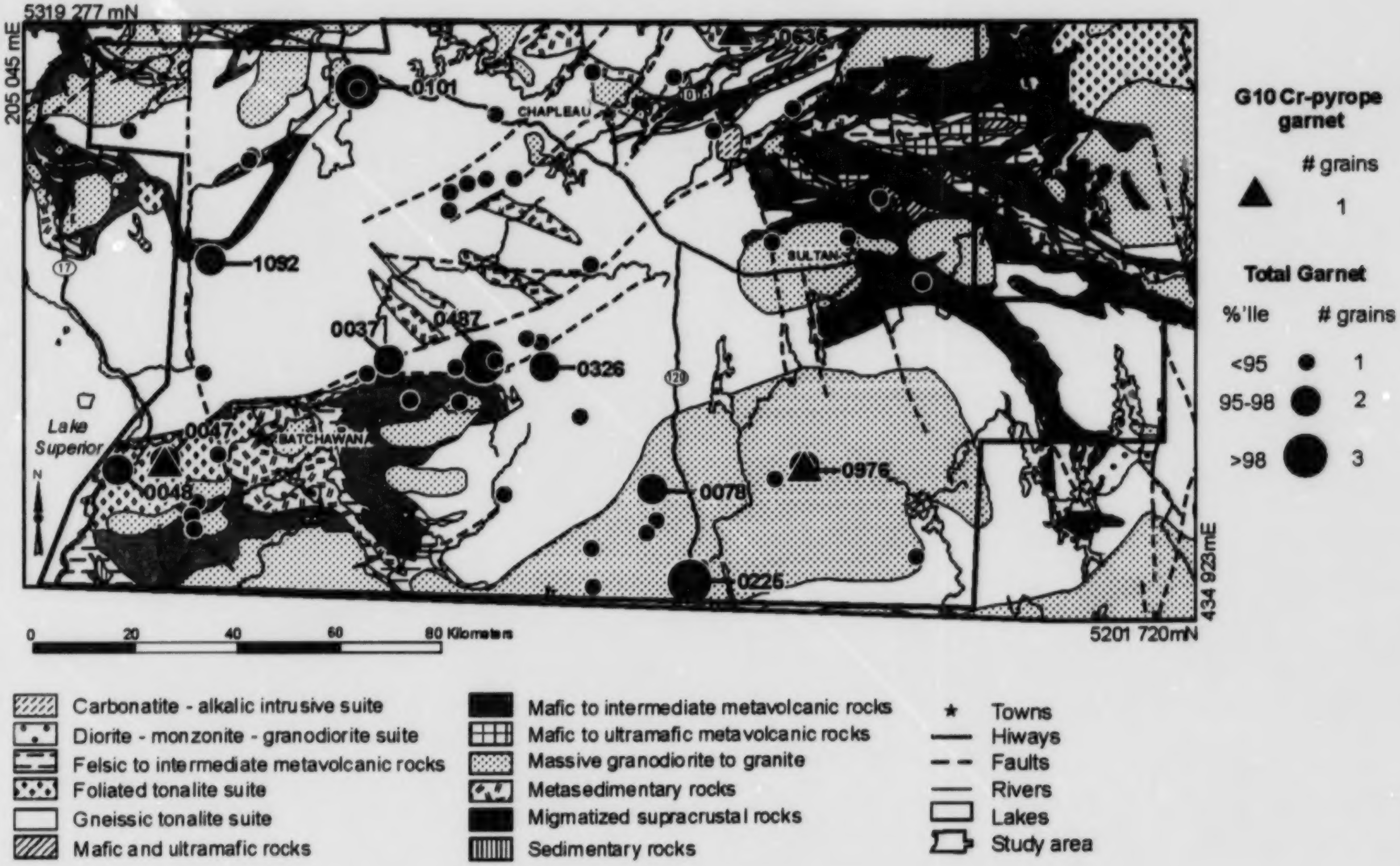


Figure 8: Garnet Cr_2O_3-CaO and TiO_2-Na_2O plots. A) "G10" and "G9" Cr-pyrope garnet Cr_2O_3-CaO plot (after Dawson and Stephens 1975). B) eclogitic garnet TiO_2-Na_2O plot (after Fipke et al. 1995).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CHAPLEAU
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BATCHAWANA
0048
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0976
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434 923mE
5201 720mN
0
20
40
60
80 Kilometers
G10 Cr-pyrope garnet
# grains
1
Total Garnet
%'ile
# grains
<95
1
95-98
2
>98
3
Carbonatite - alkalic intrusive suite
Diorite - monzonite - granodiorite suite
Felsic to intermediate metavolcanic rocks
Foliated tonalite suite
Gneissic tonalite suite
Mafic and ultramafic rocks
Mafic to intermediate metavolcanic rocks
Mafic to ultramafic metavolcanic rocks
Massive granodiorite to granite
Metasedimentary rocks
Migmatized supracrustal rocks
Sedimentary rocks
Towns
Hiways
Faults
Rivers
Lakes
Study area

Figure 9. Regional distribution of kimberlite indicator garnet grains based on raw data.

The proportional dot diagram for kimberlite indicator garnets, including "G10, "G9" Cr-pyrope, eclogitic and megacrystic grains shows several sites containing significant amounts of kimberlite indicator garnets, based on raw data (Figure 9). Anomalous samples that contain a variety of kimberlite indicator garnets; including eclogitic, megacrystic "G10" Cr-pyrope and "G9" Cr-pyrope (especially "G9" grains that contain garnet compositions plotting near the 85% line) are most favorable for kimberlite exploration. The "G10" Cr-pyrope garnets were recovered from 3 different areas (samples KAP-0047, KAP-0635 and KAP-0976). Sample KAP-0047 also contains a eclogitic KIM garnet and sample KAP-0976 also contains a "G9" Cr-pyrope garnet. For results using normalized data, see Appendix C.

Results of garnet grains normalized to table weight feed showed similar anomalies as displayed by the raw data. Thus, only the proportional dot diagram for raw data of garnet grains is shown in this report.

CHROMITE

It is difficult to classify chromites as kimberlite indicator minerals because of their presence in many different rock types. Compositional overlap is inevitable. The TiO_2 vs. Cr_2O_3 wt% discriminant diagram is used in kimberlite exploration to determine whether chromites originate from kimberlites and lamproites or non-kimberlitic/lamproitic sources (Fipke et al. 1995). Chromite grains plotting in the overlap field of Fipke et al.'s (1995) TiO_2-Cr_2O_3 diagram are from an unknown source. However, grains plotting in this field may still be from kimberlite sources and are therefore included in the KIM database (Appendix C).

Another diagram used by Fipke et al. (1995) is the MgO vs. Cr_2O_3 wt% discriminant diagram. A chromite grain plotting in the "diamond inclusion field" on this diagram is as significant as finding a "G10" garnet. These chromites are characterized by a Cr_2O_3 content greater than 61 wt% (Gurney 1984) and an MgO content greater than 10 wt% (Fipke et al. 1995). According to Sage (2000b), this diagram could also be used to differentiate between KIMs and possible pseudokimberlites. Kimberlites found in the Attawapiskat region of Ontario generally contain MgO content <12 wt% and Cr_2O_3 > 40wt%. Only one kimberlite pipe, the Kyle Lake-1 pipe, contained indicator grains that were not of the same compositions; MgO >12 wt% and Cr_2O_3< 40 wt%. Chromite grains recovered from pseudo-kimberlites in Sage's (2000b) study also generally demonstrated >12 wt% MgO and as low as 10 wt% Cr_2O_3. For this study, all chromite grains that do not fall in the non-kimberlite/lamproite field of the Cr_2O_3-TiO_2 diagram are included in the KIM dataset.

A total of 470 chromite grains underwent microprobe analysis at the Geoscience Laboratories. One grain plotted in the diamond inclusion field of Fipke et al.'s (1995) MgO vs. Cr_2O_3 diagram (KAP-0134-18). Two other chromite grains, also recovered from sample KAP-0134, plotted slightly above the diamond inclusion field and diamond intergrowth field of both MgO-Cr_2O_3 and TiO_2-Cr_2O_3 plots (Figure 10). For this study, these grains are considered significant and are classified as a diamond inclusion chromite (sample KAP-0134-21) and a diamond intergrowth chromite (sample KAP-0134-16). Of the remaining 467 grains, 18 plotted in the field unique to kimberlites and lamproites, 380 plotted in the overlap field and 69 in the non-kimberlitic/lamproitic field of the Fipke et al. (1995) TiO_2-Cr_2O_3 diagram (Figure 10b). Mineral chemistry for all chromite grains is listed in Appendix D of MRD 82 (Ontario Geological Survey 2001b).

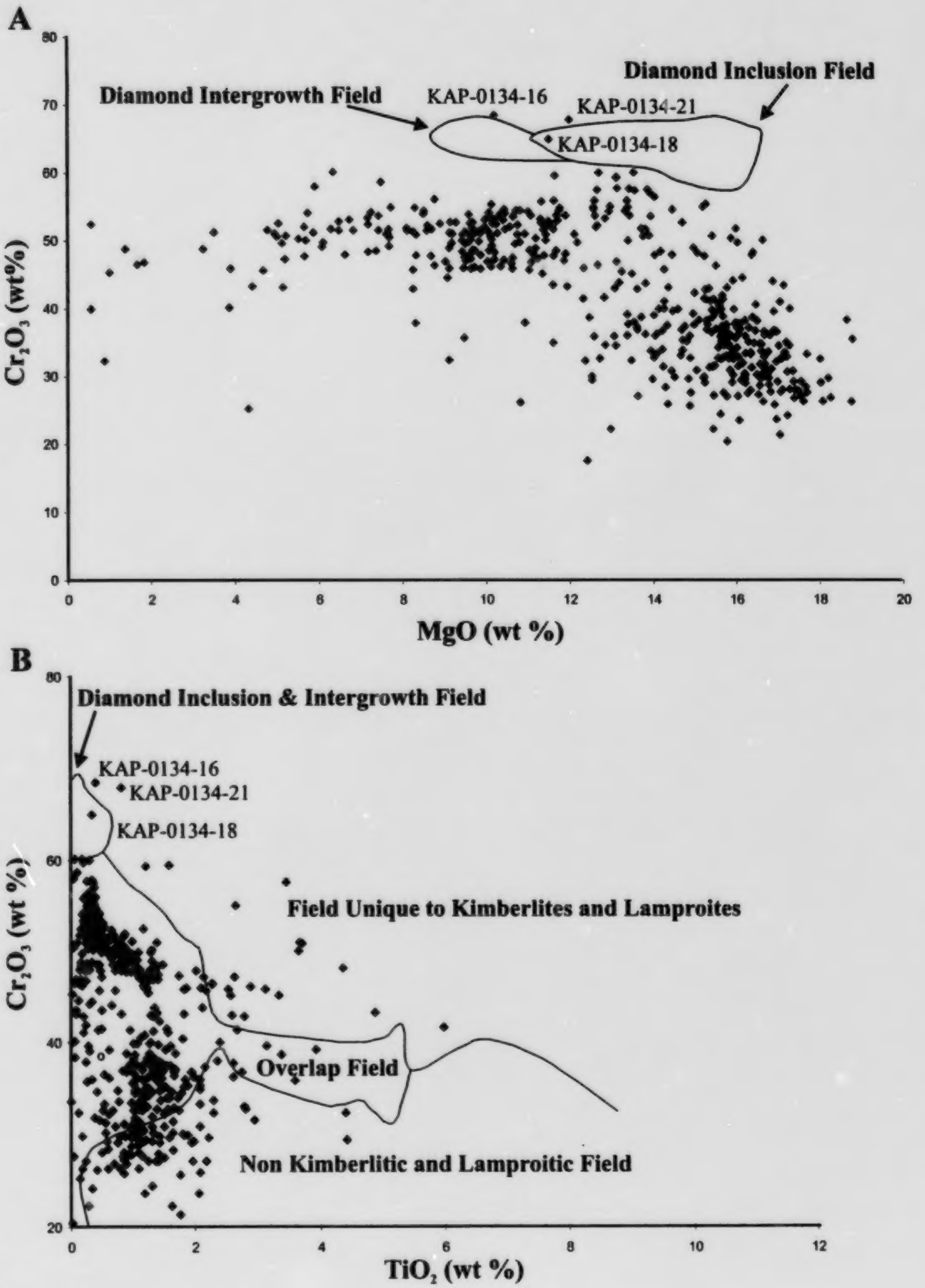
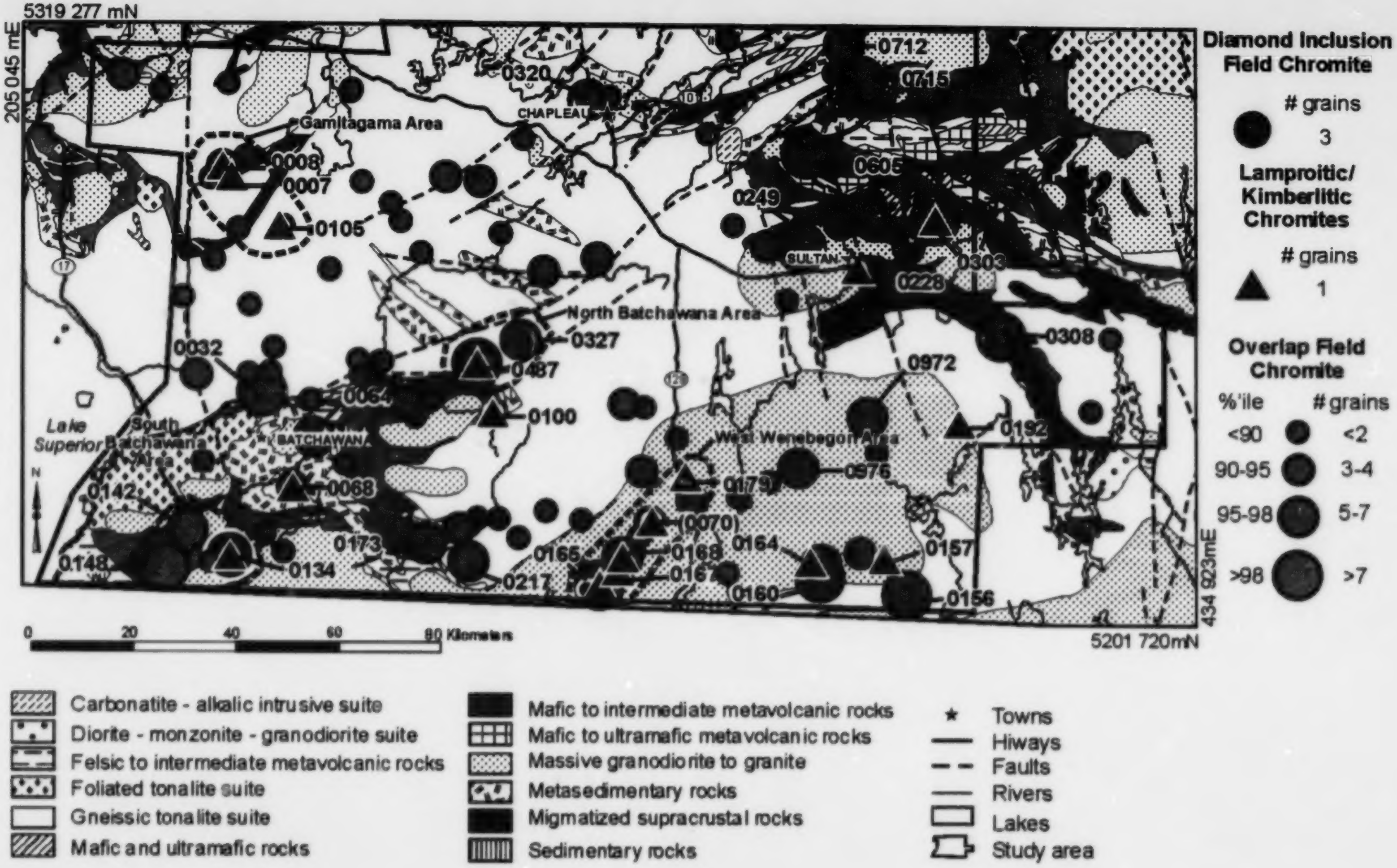


Figure 10: Chromite plots. A) Chromite Cr$_2$O$_3$-MgO plot. B) Chromite Cr$_2$O$_3$-TiO$_2$ plot (After Fipke et al. 1995)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>7
Carbonatite - alkalic intrusive suite
Diorite - monzonite - granodiorite suite
Felsic to intermediate metavolcanic rocks
Foliated tonalite suite
Gneissic tonalite suite
Mafic and ultramafic rocks
Mafic to intermediate metavolcanic rocks
Mafic to ultramafic metavolcanic rocks
Massive granodiorite to granite
Metasedimentary rocks
Migmatized supracrustal rocks
Sedimentary rocks
Towns
Hiways
Faults
Rivers
Lakes
Study area

Figure 11. Regional distribution of chromite grains based on raw data.

The proportional dot diagram for kimberlite indicator chromites shows 4 areas and several individual sites containing anomalous values (Figure 11). Within the south Batchawana area, sample KAP-0134 contains 2 diamond inclusion field chromites, 1 diamond intergrowth chromite, 1 chromite unique to kimberlites and lamproites and 3 overlap field chromites. This area is the most favorable for diamoniferous kimberlite exploration according to the chromite data. Other areas containing at least 1 kimberlitic/lamproitic chromite including the Gamitagama, north Batchawana and west Wenebegon areas, are also favourable for kimberlite exploration. The west Wenebegon area displays an interesting 5 sample linear trend of kimberlitic/lamproitic chromites located southeast of a deep seated fault zone (Figure 11).

During the grain picking process, large amounts of chromite grains were identified in several samples. In these cases, an estimated number of chromite grains was given and only the grains that were picked were sent for probing. For this reason, Appendix C shows chromite grains not only normalized to table weight feed but also to an estimated number of grains. Results of chromite grains normalized to table weight feed showed similar anomalies as displayed by the raw data. Thus, only the proportional dot diagram for the chromite raw data is shown in this report. Most samples containing an estimated number of grains displayed anomalous values on the proportional dot diagram using raw data. Samples containing anomalous chromite grain levels that had the number of chromite grains estimated include samples KAP-; 0064, 0100, 0134, 0148, 0156, 0165, 0168, 0249, 0308, 0320, 0327, 0487, 0605 and 0712. Other samples for which the number of chromite grains was estimated includes samples KAP-; 0071, 0077, 0083, 0099, 0143, 0316, 0489 and 0483. See Appendix C for calculated estimates of chromite grains.

MG-ILMENITE

Ilmenites found within kimberlites generally contain MgO values between 4 and 15 wt% (McCallum and Vos 1993). These ilmenites are considered especially useful kimberlite indicator minerals (Morris and Kaszycki 1997) when found in samples containing other KIMs. However, caution must be taken when analyzing these grains because other mafic and ultramafic alkaline rocks also contain Mg-ilmenite with similar compositions. Ilmenite compositions found in kimberlites of the Attawapiskat region typically contain >1.5 wt% Cr_2O_3. Pseudo-kimberlites north of the study area contain < 1.5 wt% Cr_2O_3 (Sage 2000b).

A total of 285 Mg-ilmenite grains underwent microprobe analysis. Fifty-six grains contained MgO values between 4 to 15 wt%. Eleven of those grains contain >1.5 wt% Cr_2O_3. These 11 grains were included in the KIM dataset (Appendix C). Geochemistry for all ilmenite grains is listed in Appendix D of MRD 82 (Ontario Geological Survey 2001b). All 56 grains were plotted on Gurney and Moore's (1991) Mg-ilmenite parabolic plot in order to determine whether they originated from a reducing environment (favourable for diamond preservation within the magma) or from an oxidizing environment (conducive to diamond resorption into the magma) (Figure 12).

The proportional dot diagram for Mg-ilmenites (Figure 13) shows 3 areas containing significant Mg-ilmenite KIMs. Two of these areas are in proximity to anomalous sites highlighted on the garnet and chromite proportional dot diagrams. These include the south Batchawana and west Wenebegon areas.

Results of ilmenite grains normalized to table weight feed showed similar anomalies as displayed using raw data. Thus, only the proportional dot diagram for the raw data of Mg-ilmenites is shown in this report.

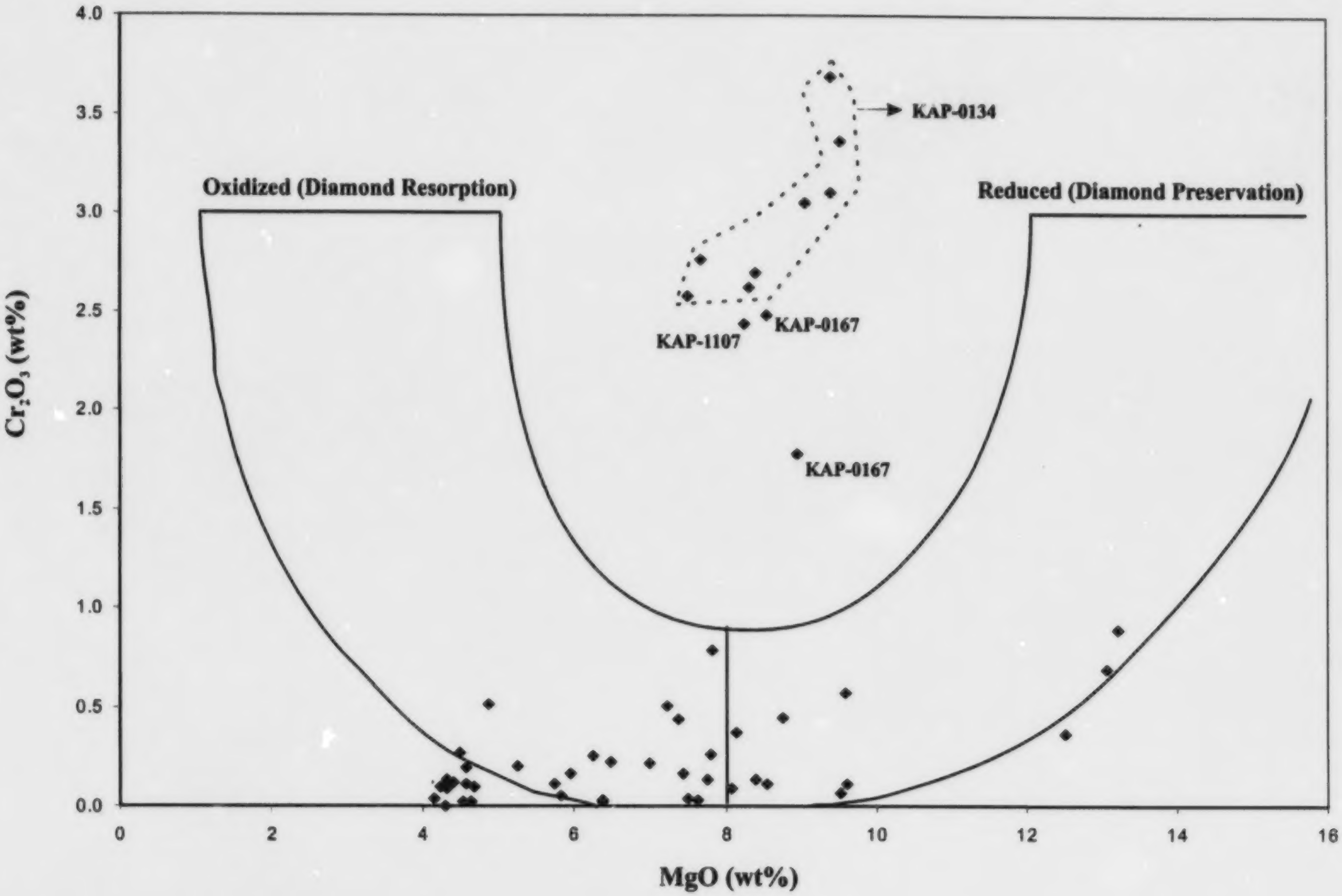
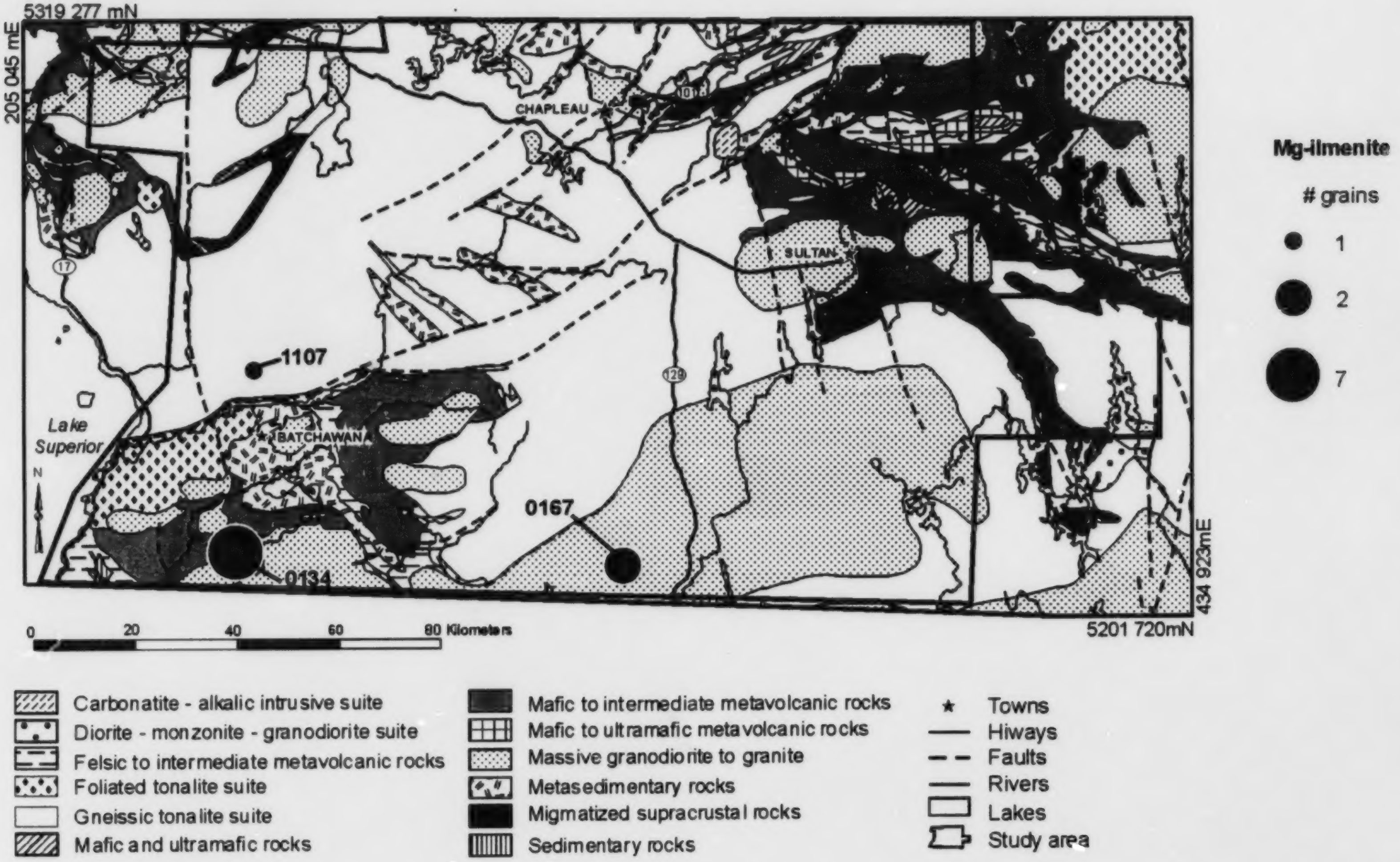


Figure 12: Mg-ilmenite Cr_2O_3 - MgO plot (after Gurney and Moore 1991)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Mg-ilmenite
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Carbonatite - alkalic intrusive suite
Diorite - monzonite - granodiorite suite
Felsic to intermediate metavolcanic rocks
Foliated tonalite suite
Gneissic tonalite suite
Mafic and ultramafic rocks
Mafic to intermediate metavolcanic rocks
Mafic to ultramafic metavolcanic rocks
Massive granodiorite to granite
Metasedimentary rocks
Migmatized supracrustal rocks
Sedimentary rocks
Towns
Hiways
Faults
Rivers
Lakes
Study area

Figure 13. Regional distribution of Mg-ilmenite grains based on raw data.

CR-DIOPSIDE

Cut off values of 1.45 wt % Cr_2O_3 (Stephens and Dawson 1977) and 0.5 wt% Cr_2O_3 (Thorleifson and Garrett 1993) have previously been used to identify Cr-diopsides of potential kimberlitic affinity. However, Cr-diopsides with these compositions also originate from other sources (Morris et al. 1999). For this reason, Cr-diopside is not a particularly good indicator mineral unless found in samples containing other KIMs.

Recently, a new classification of Cr-diopsides developed by Morris et al. (1999) has proven to be an excellent way of discriminating between Cr-diopsides derived from kimberlite vs. other sources. An Al-Na-Cr ternary plot of atomic proportions has been tested on kimberlites and other rock types and seems to isolate Cr-diopsides associated with kimberlites. It is useful in differentiating Cr-diopside derived from a deep mantle source as opposed to a shallow crustal source, and is a far better discriminator of Cr-diopsides derived from kimberlite than from previous methods cited in the literature (Morris et al. 2000).

A total of 3612 Cr-diopside grains were recovered from samples collected in the Chapleau study area and were submitted for microprobe analysis at OGL. Two distinct groups of Cr-diopside grains were identified (Figure 14a). Group I consists of 1063 Cr-diopside grains most likely derived from a crustal source. Group II consists of 2549 Cr-diopsides that are probably derived from both crustal and mantle sources. Within the Group II pyroxene population, 546 Cr-diopside grains plot within the kimberlite field of Morris et al.'s (2000) Al-Na-Cr ternary diagram (Figure 14a). These grains have been added to the KIM dataset.

The proportional dot diagram for Cr-diopsides grains classified as KIMs (Figure 15) shows samples containing anomalous values concentrated primarily in the northwestern part of the study area. There are also anomalous clusters concentrated in the north Batchawana, west Wenebegon and south Shawmere areas (Figure 15). Of the remaining Cr-diopside grains, most samples containing group I (crustal derived) grains also contain group II (crust/mantle derived) grains (Figures 16 and 17). These samples are located in the western part of the study area and are associated with regional faulting.

Similar to the chromite grains, several samples contained high numbers of Cr-diopsides grains and only a representative number of grains were picked for microprobe analysis. Appendix C shows Cr-diopside grains normalized to both table weight feed and an estimated number of grains for these samples. The distribution of anomalous areas on the kimberlite indicator Cr-diopside proportional dot diagram using raw data (Figure 15) is not significantly changed by using the estimated data. Therefore, the estimated plot is not presented as a proportional dot diagram in this report. Samples containing an estimate number of grains include samples KAP-; 0034, 0040, 0072, 0073, 0077, 0083, 0086, 0097, 0104, 0148, 0269, 0439, 0477, 0490, 0529, 0536, 0541, 0551, 0555, 0559, 0601, 0635, 0958, 0987, 0994, 0995, 0997, 1062 and 1082.

OLIVINE

Olivine grains recovered from kimberlite pipes in other parts of Ontario such as the James Bay Lowland and Kirkland Lake, have forsterite values (Fo=Mg/Mg+Fe) greater than 80 (Sage 1996, Fipke et al. 1995) and contain significant amounts of nickel (0.2-0.49 wt % NiO) (Fipke et al. 1995). These values have been used as cut offs for possible kimberlitic olivines. A total of 76

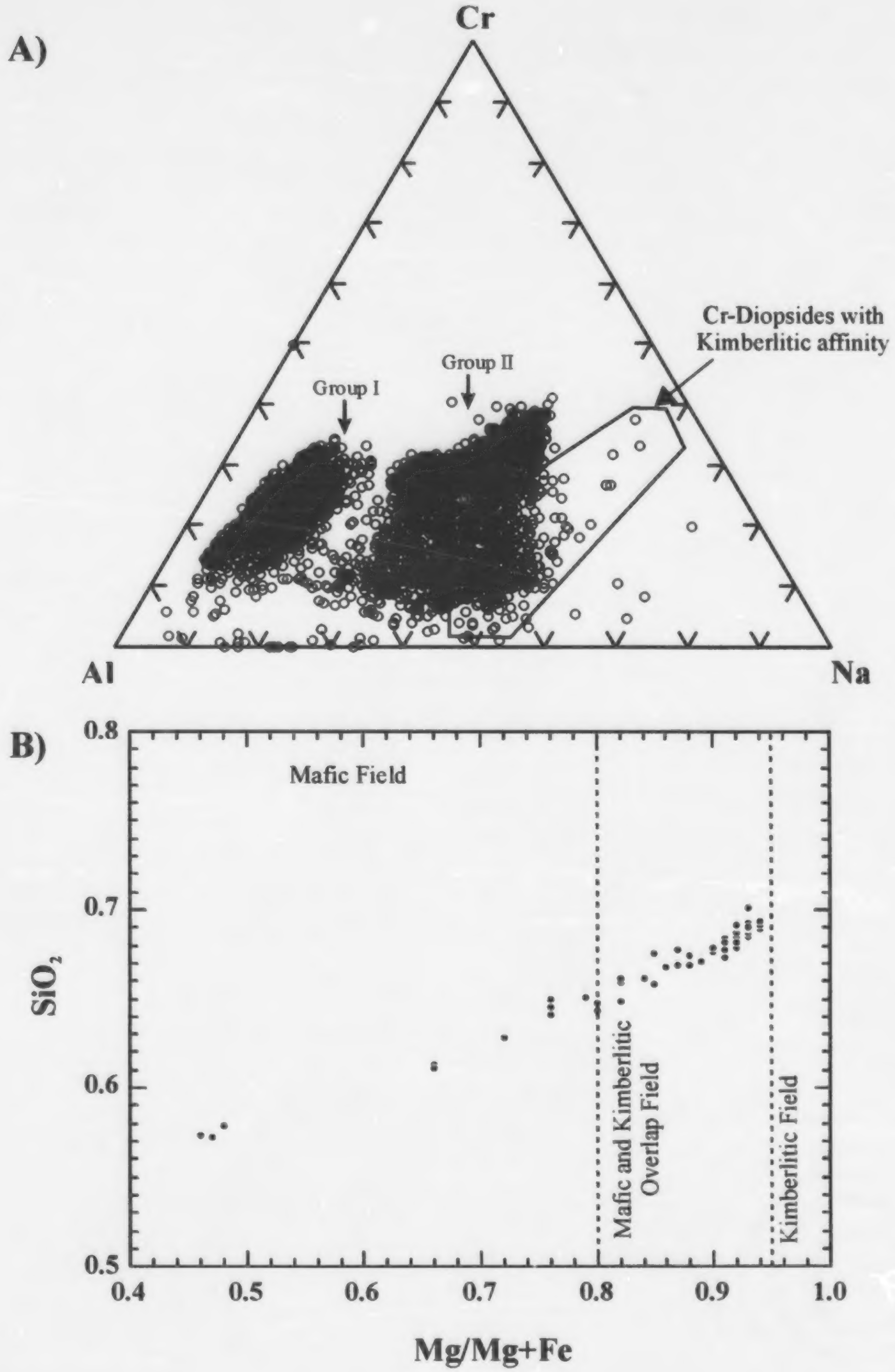
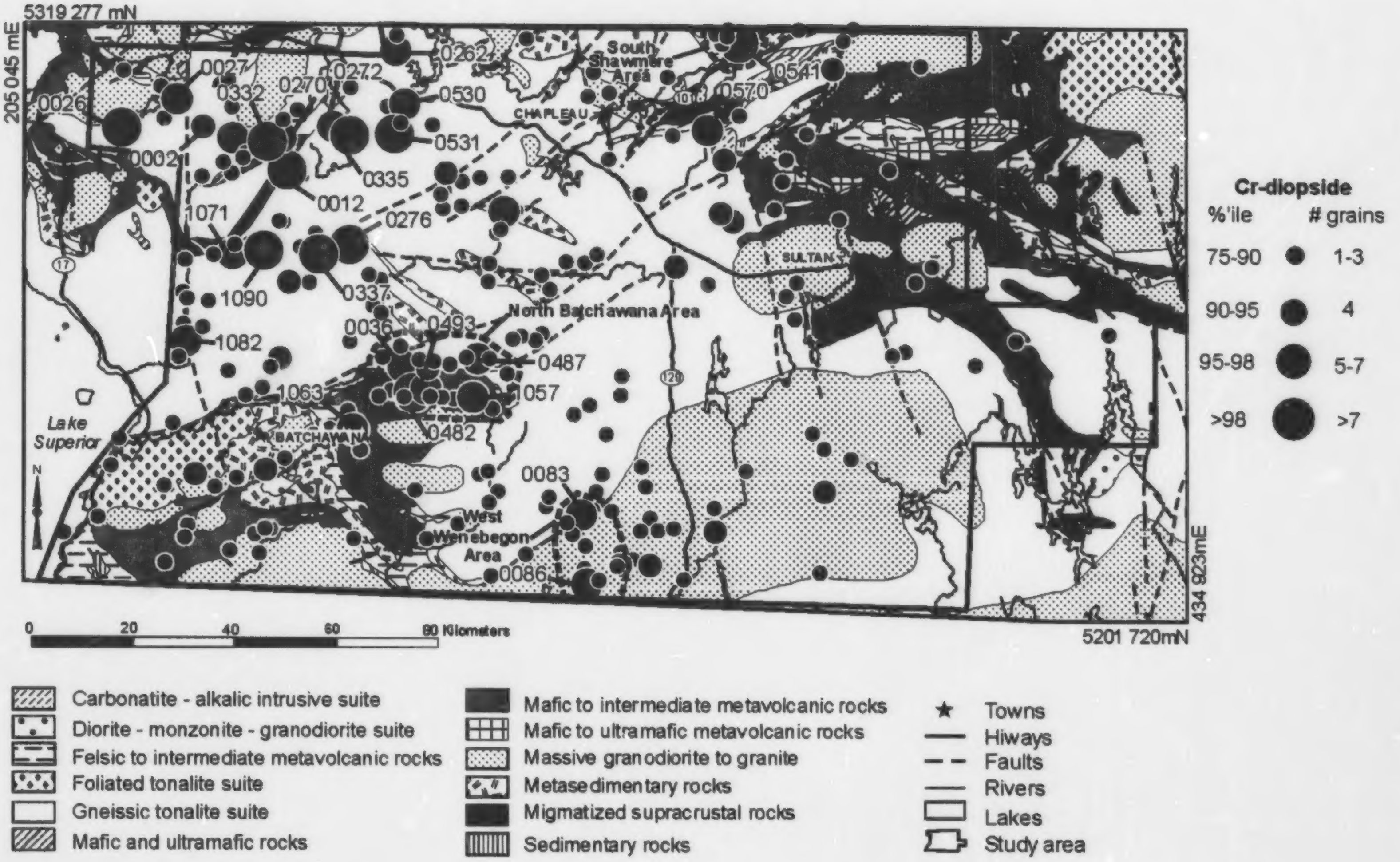


Figure 14: Cr-diopside ternary plot and olivine plot. A) Pyroxene ternary plot of Al - Na - Cr (atomic proportions). B) SiO_2 vs Mg/Mg+Fe (Forsterite) wt% plot for olivine. (After Morris et al. 2000)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South Shawmere Area
CHAPLEAU
SULTAN
North Batchawana Area
BATCHAWAN
West Wenebegon Area
Lake Superior
17
101
129
N
0
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80 Kilometers
Cr-diopside
%'ile
# grains
75-90
1-3
90-95
4
95-98
5-7
>98
>7
Carbonatite - alkalic intrusive suite
Diorite - monzonite - granodiorite suite
Felsic to intermediate metavolcanic rocks
Foliated tonalite suite
Gneissic tonalite suite
Mafic and ultramafic rocks
Mafic to intermediate metavolcanic rocks
Mafic to ultramafic metavolcanic rocks
Massive granodiorite to granite
Metasedimentary rocks
Migmatized supracrustal rocks
Sedimentary rocks
Towns
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Lakes
Study area

Figure 15. Regional distribution of kimberlitic Cr-diopside grains based on raw data.

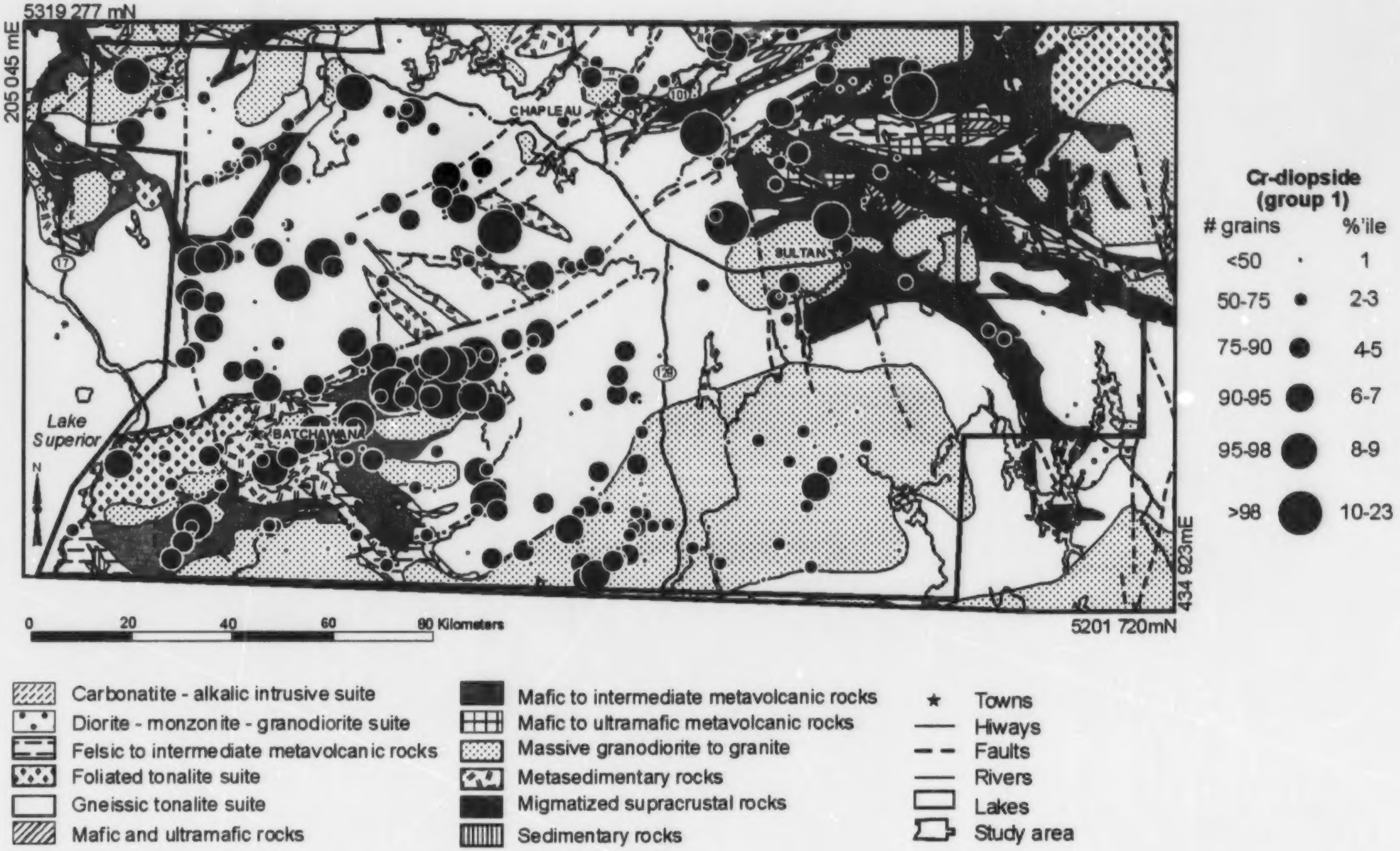

5319 277 mN
205 045 mE
CHAPLEAU
SULTAN
BATCHAWANA
Lake Superior
N
17
101
129
434 923mE
5201 720mN
0
20
40
60
80 Kilometers
Cr-diopside (group 1)
# grains
%'ile
<50
1
50-75
2-3
75-90
4-5
90-95
6-7
95-98
8-9
>98
10-23
Carbonatite - alkalic intrusive suite
Diorite - monzonite - granodiorite suite
Felsic to intermediate metavolcanic rocks
Foliated tonalite suite
Gneissic tonalite suite
Mafic and ultramafic rocks
Mafic to intermediate metavolcanic rocks
Mafic to ultramafic metavolcanic rocks
Massive granodiorite to granite
Metasedimentary rocks
Migmatized supracrustal rocks
Sedimentary rocks
Towns
Hiways
Faults
Rivers
Lakes
Study area

Figure 16. Regional distribution of non-kimberlitic group I Cr-diopside grains based on raw data.

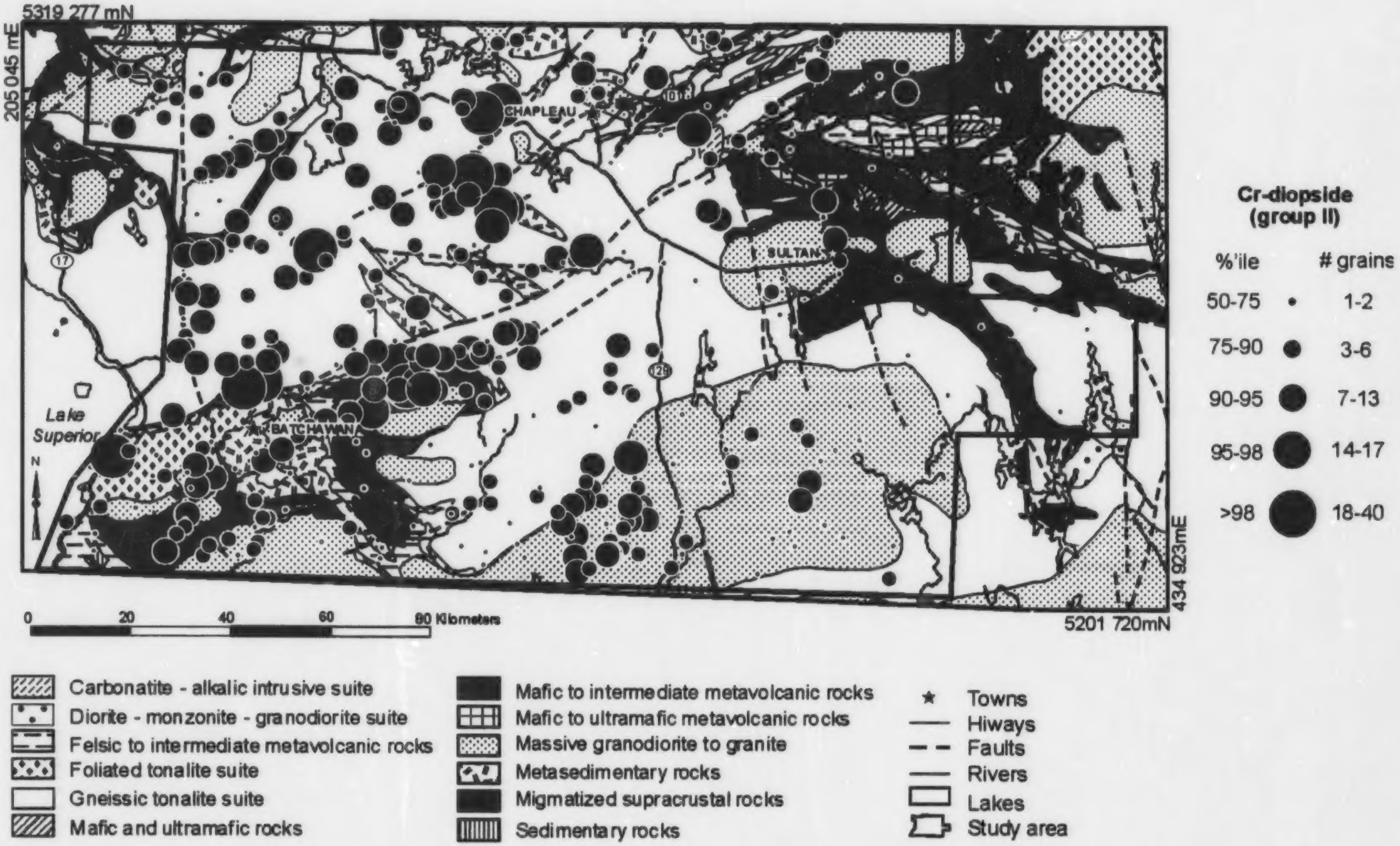

5319 277 mN
205 045 mE
CHAPLEAU
SULTAN
BATCHAWANA
Lake Superior
17
101
129
N
434 923mE
5201 720mN
0
20
40
60
80 Kilometers
Cr-diopside (group II)
%'ile
# grains
50-75
1-2
75-90
3-6
90-95
7-13
95-98
14-17
>98
18-40
Carbonatite - alkalic intrusive suite
Diorite - monzonite - granodiorite suite
Felsic to intermediate metavolcanic rocks
Foliated tonalite suite
Gneissic tonalite suite
Mafic and ultramafic rocks
Mafic to intermediate metavolcanic rocks
Mafic to ultramafic metavolcanic rocks
Massive granodiorite to granite
Metasedimentary rocks
Migmatized supracrustal rocks
Sedimentary rocks
Towns
Hiways
Faults
Rivers
Lakes
Study area

Figure 17. Regional distribution of non-kimberlitic group II Cr-diopside grains based on raw data.

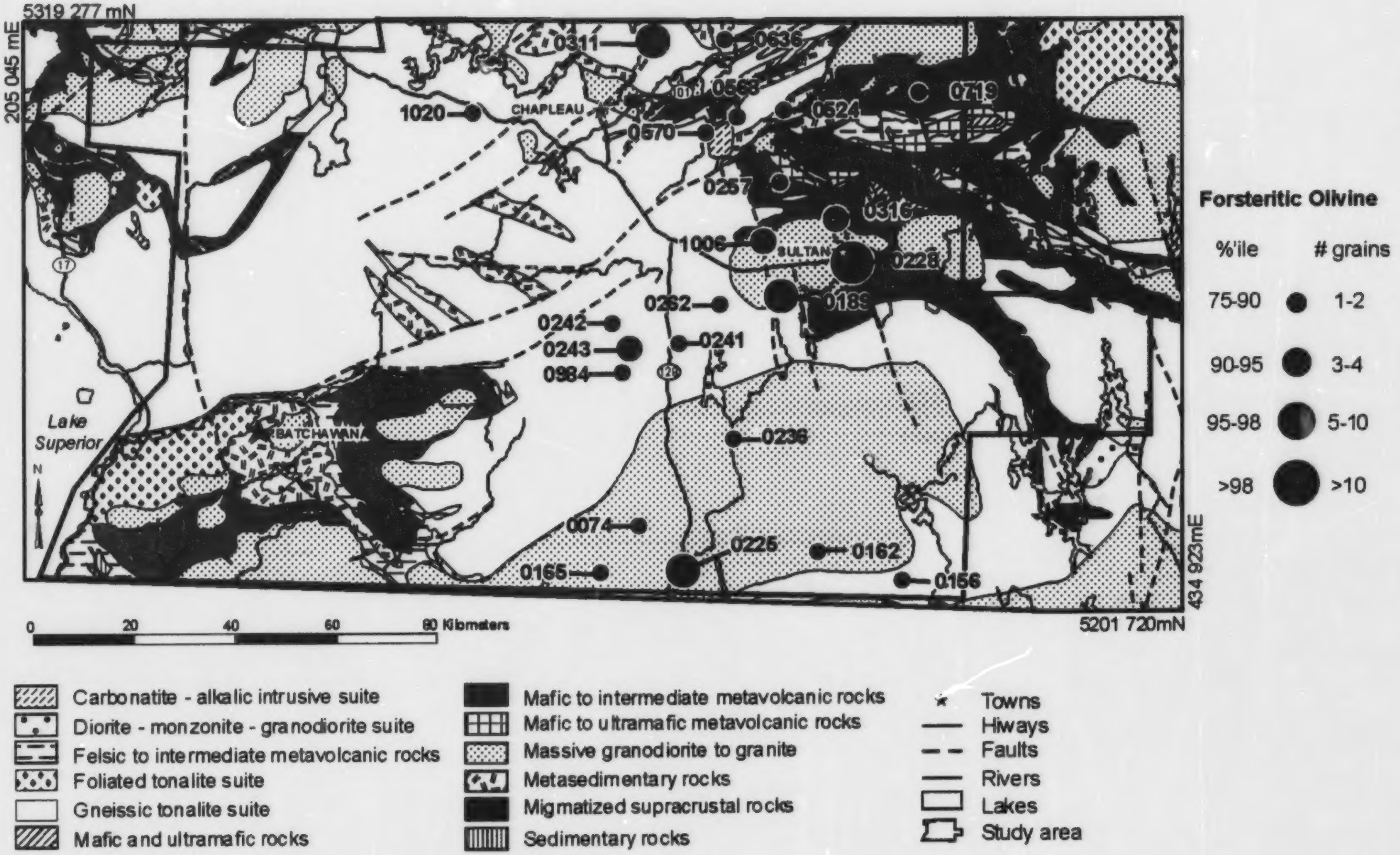

5319 277 mN
205 045 mE
5201 720mN
434 923mE
CHAPLEAU
SULTAN
BATCHAWANA
Lake Superior
N
17
101
129
0311
0636
0563
0719
0524
1020
0570
0257
0316
1006
0228
0262
0189
0242
0243
0241
0984
0236
0074
0225
0162
0165
0156
0
20
40
60
80 Kilometers
Forsteritic Olivine
%'ile
# grains
75-90
1-2
90-95
3-4
95-98
5-10
>98
>10
Carbonatite - alkalic intrusive suite
Diorite - monzonite - granodiorite suite
Felsic to intermediate metavolcanic rocks
Foliated tonalite suite
Gneissic tonalite suite
Mafic and ultramafic rocks
Mafic to intermediate metavolcanic rocks
Mafic to ultramafic metavolcanic rocks
Massive granodiorite to granite
Metasedimentary rocks
Migmatized supracrustal rocks
Sedimentary rocks
Towns
Hiways
Faults
Rivers
Lakes
Study area

Figure 18. Regional distribution of forsteritic (Fo > 80) olivine based on raw data.

olivine grains plotted in the >80 Fo mafic and kimberlitic overlap field in the SiO_2 vs. Fo (Mg/Fe+Mg) diagram, and 10 grains plotted in the mafic field (Morris et al. 2000) (Figure 14b). Only the 76 overlap field grains have been included in the KIM data set (Appendix C).

The proportional dot diagram for kimberlite indicator olivines shows several individual sites, mostly located in the eastern part of the study area, containing anomalous values (Figure 18). Results of olivine grains normalized to table weight feed showed similar anomalies as displayed using raw data. Thus, only the proportional dot diagram for the raw data of forsteritic olivines is presented in this report (Figure 18).

RECOMMENDATIONS FOR KIMBERLITE EXPLORATION

Examination of the composition and distribution of kimberlite indicator minerals in the Chapleau area has identified several areas containing anomalous values of KIMs (Table 1). The exploration targets within the study area (Figure 19) are based on sample sites containing a combination of significant KIMs such as "G10" garnets, "G9" garnets, Mg-ilmenites, Cr-diopsides, chromites unique to lamproites and kimberlites, chromite grains that display diamond inclusion and intergrowth field compositions and forsteritic olivines (Table 1). Sample sites containing a single mineral should be considered with caution for kimberlite exploration (Table 1). Also, caution must be taken when observing KIM mineralogy because grains could be derived from other sources such as pseudo-kimberlites.

Three "G10" Cr-pyrope garnet and 3 diamond inclusion chromites were recovered within the Chapleau study area. The "G10" garnet grains are well dispersed throughout the area (samples KAP-0635, KAP-0047, KAP-0976). These samples sites are located in the south Shawmere, south Batchawana areas and in the southeastern part of the study area, respectively (Figure 19) and are favourable for kimberlite exploration. Sample KAP-0134, located in the south Batchawana area, contained 3 diamond inclusion field chromites along with other significant KIMs including: 1 kimberlitic/lamproitic chromite; 8 kimberlitic ilmenites; 2 Cr-diopsides; and 3 overlap field chromites. This sample is located approximately 23 km southeast of where the "G10" garnet was recovered. Although caution is warranted, this site may be the most favorable for kimberlite exploration.

A better knowledge of the bedrock geology surrounding the anomalous sites is needed to assess any structural or petrological relationships. There seems to be a correlation between the presence of significant numbers of KIMs and regional faults associated with the Kapuskasing Structural Zone.

Several regional magnetic anomalies exist within the Chapleau study area. Aeromagnetic maps of the KSZ (scale of 1:253 440) have been published by the Geological Survey of Canada (1974). However, these surveys are generally not adequate for the detection of kimberlite pipes because flight lines are too widely spaced. Numerous aeromagnetic maps generated from closer flight spacing have been completed by junior and major mining companies in several zones of the Chapleau study area and can found in assessment files.

Table 1: Summary table of samples containing the most significant number of KIMs within the Chapleau study area. Results can be used to target exploration (see Appendix C for code to abbreviations).

Sample KAP	KIM grains recovered (raw data)	Total KIM grains (raw data)	Total KIM grains (normalized data)
Area 1-North Batchawana			
0482	9 DC	9	7
0487	3 G9, 1 KimCr, 10 OfCr, 6 Im, 7 DC	27	32
0036	5 DC	5	5
0100	1 KIMCr, 2 OfCr, 1 DC	4	6
0483	4 OfCr	5	6
0484	5 DC	5	4
0995	1 G9, 3 DC	4	6
0997	1 G9, 3 OfCr, 3 DC	7	7
Area 2-South Batchawana			
0047	1 G10, 1 Ec2	2	4
0134	3 IfCr, 1 KimCr, 3 OfCr, 8 Im, 2 DC	17	23
0143	1 G9, 6 OfCr, 1DC	8	10
0148	9 OfCr, 2 DC	11	17
Area 3-West Wenebegon			
0165	1 KimCr, 8 OfCr, 1 DC, 1 Ol	11	13
0225	2 G9, 1 MEG, 1 DC, 6 Ol	10	10
0086	1 G9, 1 OfCr, 5DC	7	8
Area 4-Sultan			
0189	1 DC, 9 Ol	10	10
0228	1 KimCr, 2 OfCr, 29 Ol	32	41
0249	13 OfCr	13	26
0316	3 OfCr, 2 DC, 3 Ol	8	3
1006	3 Ol, 1 G9, 3 OfCr	7	9
Area 5-South Shawmere			
0541	1 G9, 13 DC	14	17
0635	1 G10, 3 DC	4	6
0636	2 OfCr, 1DC, 1 Ol	4	6
Individual Sites - Multi mineral sites			
0032	8 OfCr, 3 DC	11	21
0156	26 OfCr, 1 Ol	27	79
0160	8 OfCr, 1 DC	9	10
0303	1 KimCr, 17 OfCr	18	28
0570	1 G9, 2OfCr, 7 DC, 1 Ol	[illegible]	9
0976	1 G9, 1 G10, 5 OfCr	7	8
Individual Sites - Single mineral sites			
0012	9 DC	9	11
0026	9 DC	9	15
0027	7 DC	7	10
0308	12 OfCr	12	13
0332	9 DC	9	13
0335	9 DC	9	16
0337	9 DC	9	10
0531	9 DC	9	8
0605	15 OfCr	15	17
0715	15 OfCr	15	25

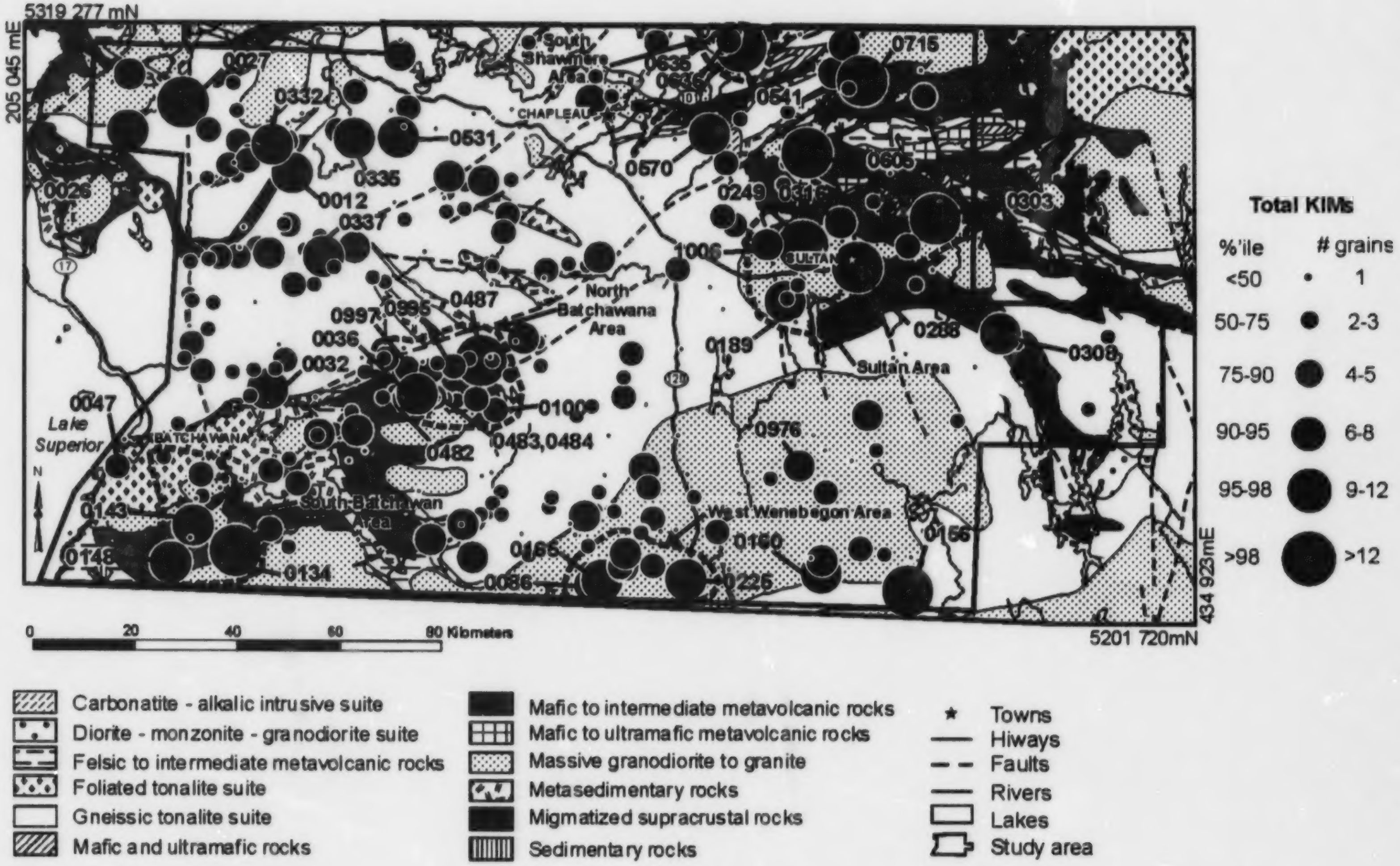

5319 277 mN
205 045 mE
434 923mE
5201 720mN
South Shawmere Area
CHAPLEAU
North Batchawana Area
Sultan Area
SULTAN
West Wenebegon Area
South Batchawan Area
BATCHAWANA
Lake Superior
N
0027
0332
0531
0335
0012
0337
0026
0997
0995
0487
0036
0032
0047
0143
0148
0134
0482
0483,0484
0100
0165
0086
0225
0160
0156
0976
0189
0288
0308
0303
0605
0715
0541
0635
0636
0570
0249
0316
1006
0 20 40 60 80 Kilometers
Total KIMs
%'ile # grains
<50 1
50-75 2-3
75-90 4-5
90-95 6-8
95-98 9-12
>98 >12
Carbonatite - alkalic intrusive suite
Diorite - monzonite - granodiorite suite
Felsic to intermediate metavolcanic rocks
Foliated tonalite suite
Gneissic tonalite suite
Mafic and ultramafic rocks
Mafic to intermediate metavolcanic rocks
Mafic to ultramafic metavolcanic rocks
Massive granodiorite to granite
Metasedimentary rocks
Migmatized supracrustal rocks
Sedimentary rocks
Towns
Hiways
Faults
Rivers
Lakes
Study area

Figure 19. Regional distribution of total kimberlite indicator mineral grains based on raw data.

Metamorphic/Magmatic Massive Sulphide Indicator Minerals (MMSIMs®)

Metamorphic/magmatic massive sulphide indicator minerals are stable heavy minerals that occur in alteration zones associated with volcanogenic massive sulphide deposits in high grade terranes, skarn and greisen deposits and magmatic Ni-Cu sulphide deposits (Averill 1999). Heavy mineral assemblages for each deposit type are described in Averill (1999). Like KIMs, MMSIMs® are used to trace the indicator minerals up-stream and/or up-ice to the bedrock source from which they were derived. Within the Chapleau study area, MMSIM® grains have been subjected to many types of transport including, glacial, glaciofluvial and alluvial. This must be taken into consideration during exploration for bedrock sources of the indicator minerals.

The best MMSIM® anomalies include 2 or more indicator mineral species. Common mineral associations are gahnite-barite, chalcopyrite-spessartine (or Mn epidote), gahnite-chalcopyrite-staurolite (or anthophyllite) and red rutile-spinel-kyanite (or sillimanite). Other minerals enriched in ore metals instead of (or in addition to) alteration zone elements, such as gahnite (+Zn), can also be found within metamorphic massive sulphide alteration zones and are very significant indicator minerals. Other MMSIMs® such as kyanite, sillimanite, staurolite and orthopyroxene are less useful than others, especially within the Chapleau study area, because they are common throughout some high grade regional metamorphic terranes, such as the Kapuskasing Structural Zone, as well as in hydrothermal alteration zones.

Within this study, the results of indicator minerals for each of the deposit types (volcanogenic massive sulphide deposits, skarn deposits and Ni-Cu massive sulphide deposits) are discussed. Common MMSIMs® for VMS deposits found in this study include corundum, gahnite, red rutile, Mn-epidote, chalcopyrite, gold, kyanite, sillimanite, orthopyroxene, spessartine and staurolite. MMSIMs® for Ni-Cu massive sulphide deposits include low Cr-diopside, chromite, fayalitic olivine, orthopyroxene, red rutile and chalcopyrite. Finally, MMSIMs® for skarn deposits include forsteritic olivine, chalcopyrite, gold and grossular garnet.

Mineral showings within the study area have been reported in many assessment file reports. A number of open file reports and exploration reports have also been published by the OGS and exploration companies indicating minerals showings within the study area (Fumerton and Houle 1993a, Fumerton and Houle 1993b, Fumerton et al. 1995, Fumerton and Houle 1995, Fumerton 1995, Siragusa 1986, Siragusa 1993, Brereton and Sobie 1991, Bernier 1994).

CR-DIOPSIDE

Cr-diopside pyroxene is a good indicator for Ni-Cu massive sulphide deposits due to its extreme abundance in Ni-bearing pyroxenites and peridotites (Averill 1999). Cr-diopside grains that did not plot in the KIM field of Morris et al.'s (2000) Cr - Al - Na ternary diagram (Figure 14a) and that contained less than 1.3 wt % Cr_2O_3 were included in the MMSIM® data set (Appendix D, MRD 82, Ontario Geological Survey 2001b). A total of 2579 Cr-diopside grains were identified as MMSIMs® in this study (Appendix E).

CHROMITE

The majority of chromite grains recovered from the Chapleau study area plot in the overlap field of Fipke et al.'s (1995) TiO_2 vs. Cr_2O_3 wt % diagram (Figure 10b) indicating that many of these grains are likely derived from sources other than kimberlite.

For this study, chromites that do not plot in the kimberlitic field of Fipke et al.'s (1995) Cr_2O_3 vs. TiO_2 wt% diagram (Figure 10b) have been included in the MMSIM® data set. Chromite can be an indicator for alteration zones in metamorphosed VMS deposits and in Ni-Cu massive sulphide deposits (Averill 1999). In this study, a total of 449 MMSIM® chromite grains were picked from samples recovered from the study area (Appendix E).

GAHNITE

Gahnite, a zincian spinel, is a potential indicator for metamorphosed volcanogenic massive sulphide deposits because of its hardness (8 on Mohs scale), stability in high grade metamorphic rocks and chemical stability in oxidizing surficial environments (Dunlop 2000, Sheridan and Raymond 1984, Spry and Scott 1986, Parr 1992, Chew 1977, Spry 1982, Zaleski 1989, Morris, Breaks et al. 1997). The MMSIM® indicator elements in gahnite are Mg, Zn and Al.

Gahnite can also be an indicator of pegmatite and granite. However, there appears to be a difference in mineral chemistry in gahnite derived from metamorphosed massive sulphides from those found in rare-element pegmatite and peraluminous granite (Dunlop 2000). Gahnites derived from metamorphosed massive sulphides, such as the Geco and Hurdman township mineralized zones (Morris et al. 1998), generally contain MgO values greater than 2 wt% and ZnO values ranging between 26 to 33 wt%. Gahnites from one deposit type, the Mattabi deposit, overlap with compositions of gahnites from granites and pegmatite. According to Morris et al. (1998) the MgO content in rare element pegmatites is actually lower in bedrock than the MgO of Mattabi type of mineralization. However, when assessing gahnite grains obtained from surficial sediments it is at times difficult to determine the source rock compositions. Caution must be exercised when using gahnite geochemistry from overburden samples because they show more variability and overlap in mineral chemistry than gahnite taken from bedrock samples (Dunlop 2000).

In this study, the MgO content of gahnite grains has been used to distinguish gahnite recovered from Geco and Hurdman township type polymetallic deposits (MgO >2 wt%) from rare-element pegmatites, peraluminous granites or a Mattabi type polymetallic deposit (MgO <2 wt%). Summary statistics for gahnite grains are listed in Appendix E. Gahnite geochemistry is listed in Appendix F (MRD 82, Ontario Geological Survey 2001b).

A total of 50 spinel grains from the Chapleau study area underwent microprobe analysis. Nineteen of these grains contained very low wt% ZnO values and are classified as spinels. Thirty-one grains classified as gahnite. Of these, 15 contained >2 wt % MgO (similar to Geco and Hurdman township type mineralization), and 16 contained < 2 wt% MgO (similar to pegmatite, granite and Mattabi type mineralization) (Appendix E).

OTHER MMSIMs®

Cr-rich red rutiles are good indicator minerals for metamorphosed VMS and Ni-Cu massive suphide deposits (Averill 1999). Within a Ni-Cu massive sulphide deposit, the removal of large volumes of Fe from the silicate phase of the magma to form massive pyrrhotite and massive sulphides increases the Mg content of olivines and pyroxenes (other good indicator minerals for Ni-Cu massive sulphide deposits). This results in a transfer of Cr from chromite to Fe-free minerals such as rutile (Averill 1999). In this study, rutile grains did not undergo microprobing, thus all red rutile grains (red being the colour indicating a Cr-rich rutile) picked by ODM were included in the MMSIM® data sets for VMS and Ni-Cu massive sulphide indicator minerals.

RECOMMENDATIONS FOR METAMORPHIC/MAGMATIC MASSIVE SULPHIDE EXPLORATION

MMSIMs® associated with metamorphosed volcanogenic massive sulphide (VMS) mineralization, Ni-Cu massive sulphide mineralization and skarn mineralization that were found in samples collected within this study are listed in Appendix E. Recommended exploration areas are based on sample sites containing significant numbers and a variety of MMSIM® grains. Samples containing the most significant MMSIMs® for each deposit type are listed in Tables 2, 3 and 4. A summary MMSIM® proportional dot diagram is presented for each deposit type (Figures 20, 21 and 22). All data within the MMSIM® proportional dot diagrams is raw data. For normalization of data, please refer to Appendix E.

The proportional dot diagram for VMS deposit indicator minerals shows 4 areas and several individual sites containing anomalous values (Figure 20) (Table 2). Elevated values of gahnite and red rutile are concentrated within the anomalous areas located at or near deep-seated faults associated with the Kapuskasing Structural Zone.

The proportional dot diagram for Ni-Cu massive sulphide indicator minerals, shows 3 areas and several individual sites containing anomalous values of MMSIMs® (Figure 21) (Table 3). Areas 1 and 3 seem to be associated with faults associated with the southern section of the Kapuskasing Structural Zone, within the Batchawana greenstone belt. Numerous base metal showings have been reported within the Batchawana area. References can be found in assessment file reports.

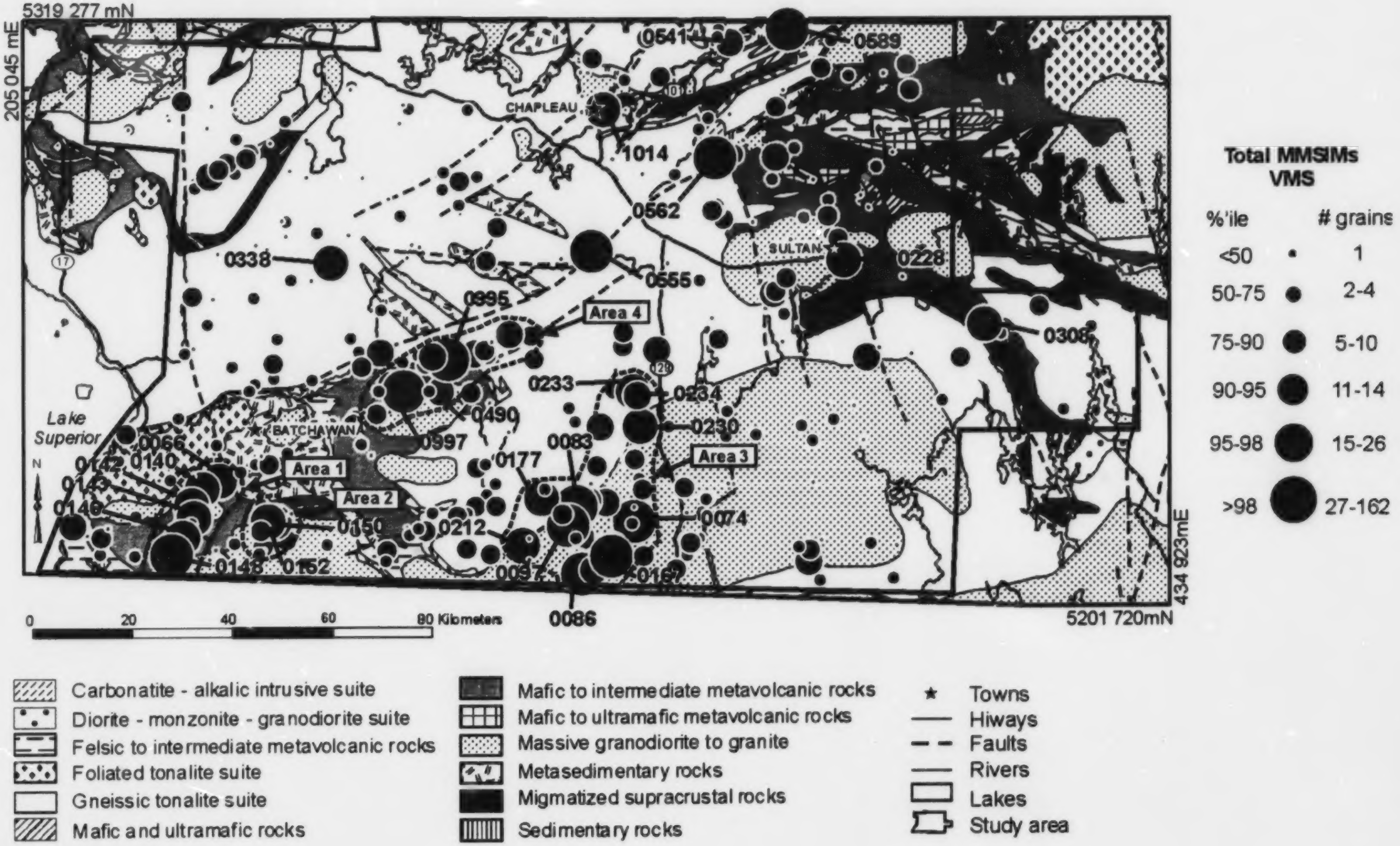
The proportional dot diagram for skarn deposit indicator minerals shows several areas containing anomalous values (Figure 22) (Table 4). A good variety and a relatively high number of skarn indicator grains were recovered from 4 samples (KAP-0228, KAP-0189, KAP-0311 and KAP-0162). However, by considering the total number of MMSIMs® for each site, few exploration targets of higher quality may be recommended.

Carbonatite Indicator Minerals

The carbonatite indicator minerals recovered from the Chapleau area (Table 5) are similar to many minerals observed within the alkalic complexes identified in this area. For a complete list of carbonatite related minerals, the reader is referred to Heinrich (1966).

Table 2: Summary table of samples containing the most significant numbers of volcanogenic massive sulphide (VMS) deposit indicator minerals within the Chapleau study area (see Appendix E for code to abbreviations).

Sample KAP	**MMSIM grains recovered: VMS deposit indicators (sillimanite, kyanite, orthopyroxene, staurolite, corundum, sapphirine/sapphire, Mn-epidote, spessartine, gahnite, chalcopyrite, gold)**	**Total MMSIMs (raw data: # grains)**
Area 1		
0066	1 sapph, Tr Ky, Tr Sil, Tr St, 5% Opx, 3 red rutile, 18 Au	22
0140	Tr Ky, Tr Sil, Tr St, Tr Opx, 14 red rutile, 1 Au	15
0142	1 sapph, Tr Ky, 1% Opx, 20 red rutile, 2 Au	23
0143	1 R corundum, 4 sapph, Tr Ky, Tr Sil, Tr St, Tr Opx, 11 red rutile	16
0146	2 R corundum, Tr Ky, Tr Sil, Tr St, 7% Opx, 19 red rutile, 3 Au	24
0148	11 cpy, 1 gahnite, 2 sapph, Tr Ky, Tr Sil, Tr St, 7% Opx, 30 red rutile, 9 Au, 1 Mn-epidote	54
Area 2		
0150	Tr Ky, Tr St, 1% Opx, 18 red rutile, 1 Au	19
0152	2 cpy, 1 gahnite, 2 R corundum, 2 sapph, Tr Ky, Tr St, Tr Opx, 19 red rutile	26
Area 3		
0074	1 R corundum, Tr Ky, Tr Sil, 10% Opx, 1 red rutile, 1 Au, 1 Mn-epidote	4
0083	5 gahnite, 13 R corundum, 10 sapph, Tr, Ky, 3 red rutile, 1 Mn-epidote	32
0086	12 gahnite, 25 R corundum, 35 sapph, Tr, Ky, Tr St, 1% Opx, 100 red rutile	172
0097	16 R corundum, 35 sapph, Tr Ky, 2 % Opx, 5 red rutile	57
0167	2 R corundum, 8 sapph, Tr Ky, Tr Sil, Tr St, Tr Opx, 14 red rutile, 1 Au, 2 Mn-epidote	27
0177	1 gahnite, 5 R corundum, 7 sapph, Tr Ky, Tr Sil, Tr Opx, 5 red rutile	18
0212	1 R corundum, 13 sapph, Tr Ky, Tr Sps, 5% Opx, 2 red rutile	16
0230	17 sapph, Tr Ky, Tr Opx, 1 red rutile, 3 Au, 1 Mn-epidote	22
0233	1 gahnite, 3 R corundum, 22 sapph, Tr Ky, Tr St, Tr Opx	26
0234	1 cpy, 1 R corundum, 4 sapph, Tr, Ky, Tr St, 8 red rutile	14
Area 4		
0490	1 cpy, 3 gahnite, 9 R corundum, 2 sapph, 1% St, 1% Opx	15
0995	1 cpy, 5 gahnite, 20 R corundum, 4 sapph, Tr Ky, Tr Sil, Tr St, 2 red rutile	32
0997	9 R corundum, 9 sapph, 0.5% Ky, Tr Sil, Tr St, 5% Opx, 13 red rutile	31
Individual Sites		
0228	11 cpy, Tr Ky, Tr Sil, Tr Sps, 10 Au	21
0308	2 cpy, 1 R corundum, Tr Ky, Tr St, Tr Sps, 2% Opx, 2 red rutile, 19 Au	24
0338	15 cpy, 1 sapph, Tr Ky, Tr St, Tr Opx	19
0541	11 cpy, 2 gahnite, 1 R corundum, 2 sapph, Tr Ky, Tr St, Tr Opx	16
0555	11 R corundum, Tr Ky, Tr Sil, Tr St, 1% Opx, 35 red rutile	46
0562	1 R corundum, 25 sapph, Tr Opx, 4 Au, 1 Mn-epidote	31
0589	3 R corundum, 60 sapph, Tr Ky, 3% Opx	63
1014	16 cpy, Tr Ky	16



5319 277 mN
205 045 mE
5201 720mN
434 923mE
Lake Superior
N
17
CHAPLEAU
SULTAN
BATCHAWANA
101
129
Area 1
Area 2
Area 3
Area 4
0541
0589
1014
0562
0338
0555
0228
0995
0308
0233
0234
0490
0230
0997
0083
0177
0066
0142
0140
0143
0146
0150
0212
0074
0148
0152
0097
0167
0086
0
20
40
60
80 Kilometers
Total MMSIMs VMS
%'ile
# grains
<50
1
50-75
2-4
75-90
5-10
90-95
11-14
95-98
15-26
>98
27-162
Carbonatite - alkalic intrusive suite
Diorite - monzonite - granodiorite suite
Felsic to intermediate metavolcanic rocks
Foliated tonalite suite
Gneissic tonalite suite
Mafic and ultramafic rocks
Mafic to intermediate metavolcanic rocks
Mafic to ultramafic metavolcanic rocks
Massive granodiorite to granite
Metasedimentary rocks
Migmatized supracrustal rocks
Sedimentary rocks
Towns
Hiways
Faults
Rivers
Lakes
Study area

Figure 20. Regional distribution of MMSIMs for volcanogenic massive sulphide deposits (VMS), based on raw data.

Table 3: Summary table of samples containing the most significant numbers of Ni-Cu massive sulphide deposit indicator minerals within the Chapleau study area (see Appendix E for code to abbreviations).

Sample KAP	MMSIM grains recovered: Ni-Cu Massive Sulphide indicators (Fayalitic olivine, orthopyroxene, low Cr-diopside, chromite, Cr-rutile, chalcopyrite)	Total MMSIMs (raw data: # grains)
Area 1		
0140	7 DC, Tr Opx, 14 red rutile	21
0142	2 DC, 1% Opx, 3 Chr, 20 red rutile, Tr Fay	25
0143	14 DC, Tr Opx, 6 Chr, 11 red rutile, Tr Fay	31
0146	6 DC, 7% Opx, 19 red rutile, Tr Fay	25
0148	11 cpy, 12 DC, 7% Opx, 11 Chr, 30 red rutile, Tr Fay	64
Area 2		
0073	12 DC, 2% Opx, 40 red rutile	52
0086	14 DC, 1% Opx, 1 Chr, 100 red rutile	115
0165	8 DC, 3% Opx, 10 Chr, 7 red rutile, Tr Fay	25
0167	15 DC, Tr Opx, 14 red rutile, Tr Fay	29
Area 3		
0442	12 DC, Tr Opx	12
0484	36 DC, 1% Opx	36
0487	2 cpy, 24 DC, Tr Opx, 15 Chr, 9 red rutile	50
0987	14 DC, Tr Opx, 10 red rutile	24
0995	1 cpy, 16 DC, 2 red rutile	19
0997	12 DC, 5% Opx, 3 Chr, 13 red rutile	28
Individual Sites		
0048	24 DC, Tr Opx	24
0150	6 DC, 1% Opx, 3% Fay, 1 Chr, 18 red rutile	25
0156	3 cpy, 3 DC, Tr Opx, 2% Fay 29 Chr	25
0332	1 cpy, 8 DC, Tr Opx	9
0337	24 DC, 1% Opx	24
0338	18 cpy, 10 DC, Tr Opx, 2 Chr	30
0446	37 DC, Tr Opx	37
0550	24 DC, 1% Opx, 1 Chr, 2 red rutile	27
0555	18 DC, 1% Opx, 4 Chr, 35 red rutile	57
0570	25 DC, Tr Opx, 2 Chr	27
1095	16 DC, Tr Opx, 8 red rutile	24

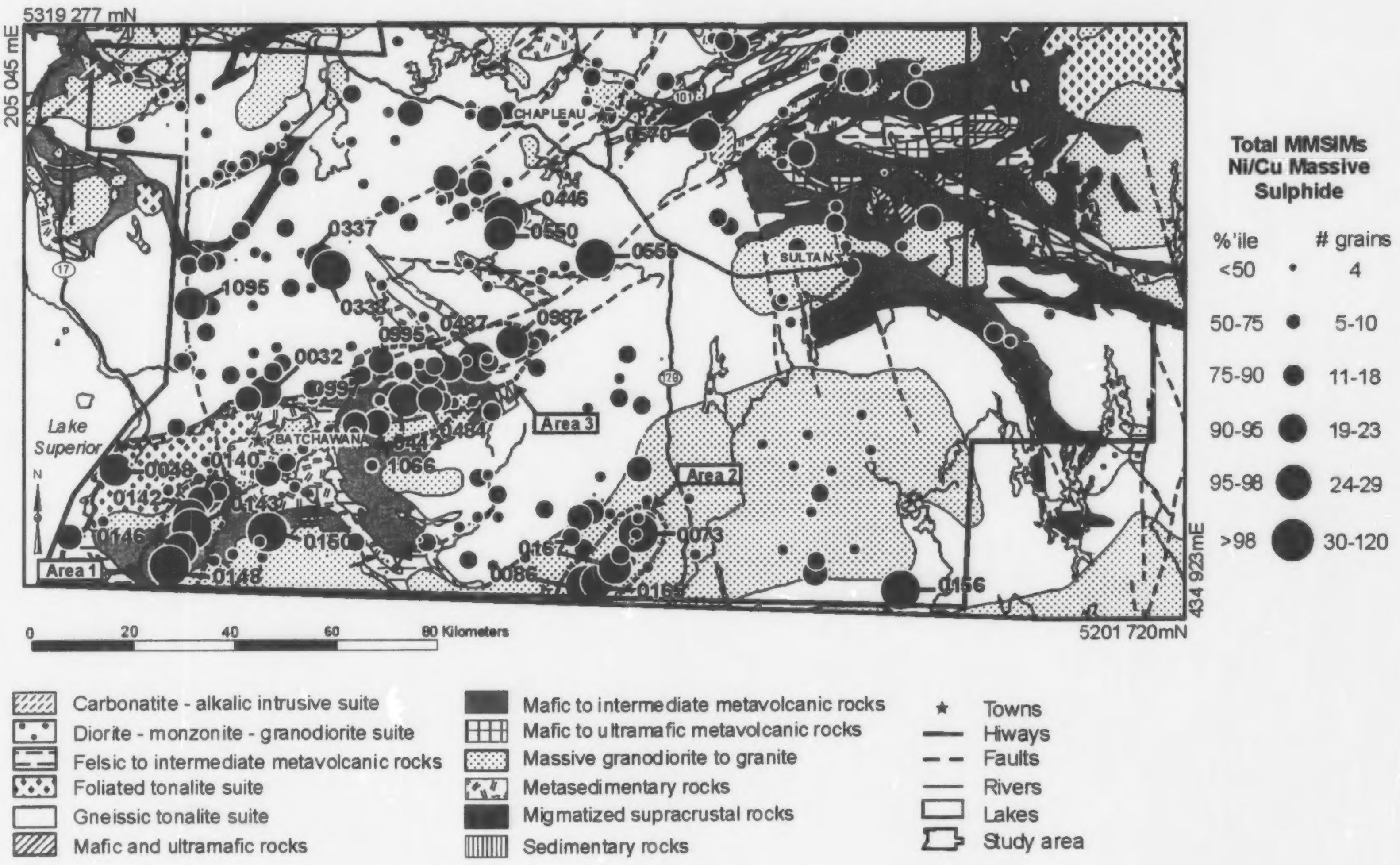
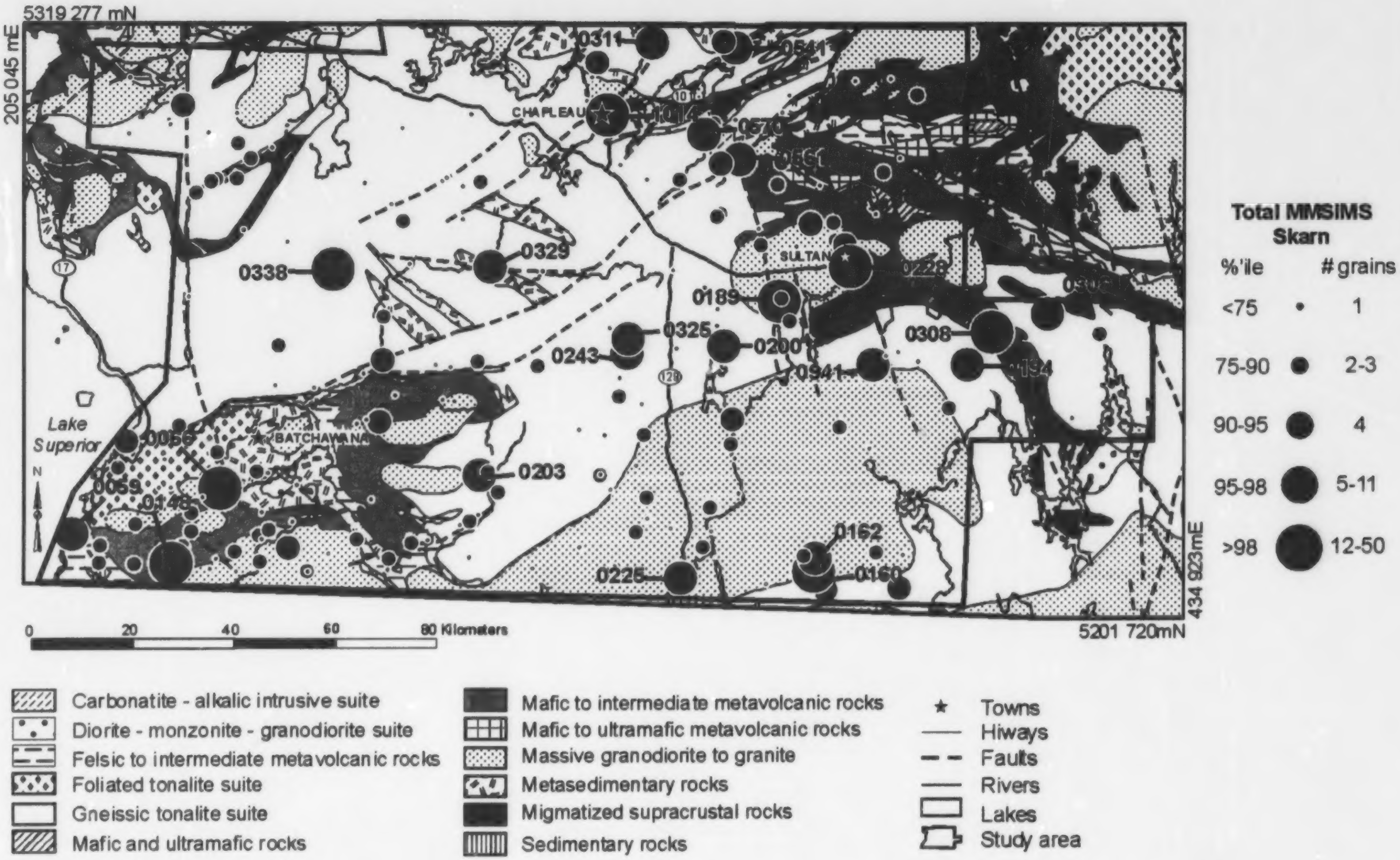

5319 277 mN
205 045 mE
434 923mE
5201 720mN
CHAPLEAU
SULTAN
BATCHAWANA
Lake Superior
N
17
101
129
Area 1
Area 2
Area 3
0570
0446
0550
0555
0337
1095
0338
0487
0987
0995
0032
0997
0484
0442
1066
0048
0140
0142
0143
0146
0150
0148
0167
0086
0165
0073
0156
0 20 40 60 80 Kilometers
Total MMSIMs Ni/Cu Massive Sulphide
%'ile
# grains
<50
4
50-75
5-10
75-90
11-18
90-95
19-23
95-98
24-29
>98
30-120
Carbonatite - alkalic intrusive suite
Diorite - monzonite - granodiorite suite
Felsic to intermediate metavolcanic rocks
Foliated tonalite suite
Gneissic tonalite suite
Mafic and ultramafic rocks
Mafic to intermediate metavolcanic rocks
Mafic to ultramafic metavolcanic rocks
Massive granodiorite to granite
Metasedimentary rocks
Migmatized supracrustal rocks
Sedimentary rocks
Towns
Hiways
Faults
Rivers
Lakes
Study area

Figure 21. Regional distribution of MMSIMs for Ni/Cu massive sulphide deposits, based on raw data.

Table 4: Summary table of samples containing the most significant numbers of skarn deposit indicator minerals within the Chapleau study area. * Most significant samples (see Appendix E for code to abbreviations).

Sample KAP	**MMSIM grains recovered: Skarn deposit indicators (forsteritic olivine, chalcopyrite, gold, grossular garnet)**	**Total MMSIMs (raw data: # grains)**
Individual sites showing anomalies in Figure 22		
0228	11 cpy, 29 Fo, 10 Au	50*
0308	2 cpy, 19 Au	21
0148	11 cpy, 9 Au	20
0066	18 Au	18
0338	18 cpy	18
1014	16 cpy	16
0189	1 cpy, 9 Fo olivine, 5 Au	15*
0160	12 cpy, 2 Au	14
0225	6 Fo olivine, 5 Au	11
0311	2 cpy, 5 Fo olivine, 4 Au	11*
0541	11 cpy	11
0059	10 cpy	10
0162	6 cpy, 2 Fo olivine, 1 Au	9*
0325	9 Au	9
0200	8 Au	8
0306	5 cpy, 2 Au	7
0561	6 Au	6
0194	5 Au	5
0203	5 Cpy	5
0243	4 Fo olivine, 1 Au	5
0329	5 Au	5
0570	1 Fo olivine, 4 Au	5



5319 277 mN
205 045 mE
434 923mE
5201 720mN
CHAPLEAU
SULTAN
BATCHAWANA
Lake Superior
N
17
101
129
0311
0541
1014
0570
0561
0338
0329
0228
0189
0306
0325
0200
0308
0243
0941
0134
0056
0203
0059
0148
0162
0225
0160
0 20 40 60 80 Kilometers
Total MMSIMS
Skarn
%'ile # grains
<75 1
75-90 2-3
90-95 4
95-98 5-11
>98 12-50
Carbonatite - alkalic intrusive suite
Diorite - monzonite - granodiorite suite
Felsic to intermediate metavolcanic rocks
Foliated tonalite suite
Gneissic tonalite suite
Mafic and ultramafic rocks
Mafic to intermediate metavolcanic rocks
Mafic to ultramafic metavolcanic rocks
Massive granodiorite to granite
Metasedimentary rocks
Migmatized supracrustal rocks
Sedimentary rocks
Towns
Hiways
Faults
Rivers
Lakes
Study area

Figure 22. Regional distribution of MMSIMs for skarn deposits, based on raw data.

Table 5: Summary of samples containing carbonatite indicator minerals within the Chapleau study area (*most significant samples).

Sample #	UTM east	UTM north	Others	Total grains	Chalcopyrite	
KAP			# grains		# est. grains	Picked grains
0010	248867	5291724	1 perovskite	1	0	0
0015	277527	5283581	1 monazite + crandallite	1	0	0
0034	249396	5245070	4 augite-pigeonite	4	0	0
0036	280274	5250746	1 pumpellyite, 1 anatase	2	0	0
0043	262060	5247175	1 hedenbergite	1	1	1
0062	267379	5237933	1 apatite	1	0	0
0071	328737	5221036	1 uvarovite	1	0	0
0073	326868	5218534	1 apatite	1	0	0
0075	323006	5214393	1 monazite	1	0	0
0083	315303	5221551	2 perovskite, 1 ilmenorutile	3	0	0
0095	319376	5229705	1 Cr-aegirine	1	0	0
0098	315206	5215318	1 aegirine	1	0	0
0102	270208	5305802	1 anatase	1	0	0
0107	225556	5308816	1 Cr-augite	1	0	0
0136	252844	5230097	1 apatite	1	0	0
0156	379104	5206988	1 galena, 3 fayalite	4	1	3
0165	318806	5208818	1 kyanite, 1 perovskite	2	0	0
0166	322945	5211778	1 augite, 34 perovskite	35*	0	0
0167	322330	5211588	4 perovskite, 1 titanite	5	0	0
0171	273907	5232038	1 titanite	1	0	0
0179	335645	5230009	4 aegirine	4	1	1
0203	295137	5229537	2 perovskite, 1 zircon	3	5	5
0204	296961	5230160	3 perovskite, 1 titanite	4	2	2
0227	368129	5275390	20 perovskite	20*	1	1
0233	326805	5244596	1 perovskite	1	0	0
0314	348960	5295181	2 monazite	2	0	0
0319	344925	5279428	1 topaz	1	0	0
0324	340140	5267109	1 Cr-aegirine	1	0	0
0450	297991	5273960	2 apatite	2	0	0
0479	278340	5245634	1 anatase	1	1	1
0480	278018	5246027	1 anatase	1	0	0
0484	284765	5246214	1 anatase	1	0	0
0487	294845	5252282	1 pyrochlore	1	2	2
0495	283408	5252126	1 anatase	1	0	0
0541	346241	5314714	10 parisite	10*	11	11
0559	342635	5281070	18 perovskite, 3 monazite	21*	1	1
0562	343251	5291606	10 aegirine, 25 perovskite, 1 andradite, 6 augite	42*	0	0
0570	339976	5297403	12 perovskite, 1 Ti-andradite, 3 ilmenorutile, 1 ferrocolumbite, 5 monazite, 16 undifferentiated perovskite, ilmenorutile	38*	0	0
0574	333243	5296458	1 ilmenorutile	1	0	0
0578	325153	5307393	1 monazite	1	0	0
0630	342870	5314526	1 synchysite, 3 parisite	4	0	0
0635	344045	5317398	6 synchysite, 4 parisite, 3 bastnaesite, 1 monazite	14	0	0
0636	343843	5316019	9 bastnaesite, 1 monazite	10*	3	3
0718	381990	5310344	1 anatase	1	0	0
0958	362965	5226347	1 monazite	1	0	0
0982	338219	5214275	9 augite, 1 pumpellyite	10*	0	0
0988	326911	5221491	4 augite	4	0	0
0990	308931	5225123	6 augite	6	0	0
0992	320140	5237609	1 monazite	1	1	1
0995	289429	5251227	1 monazite, 1 zircon	2	1	1
1058	286326	5251748	5 kyanite	5	0	0
1065	260230	5235331	1 augite, 1 pumpellyite	2	0	0

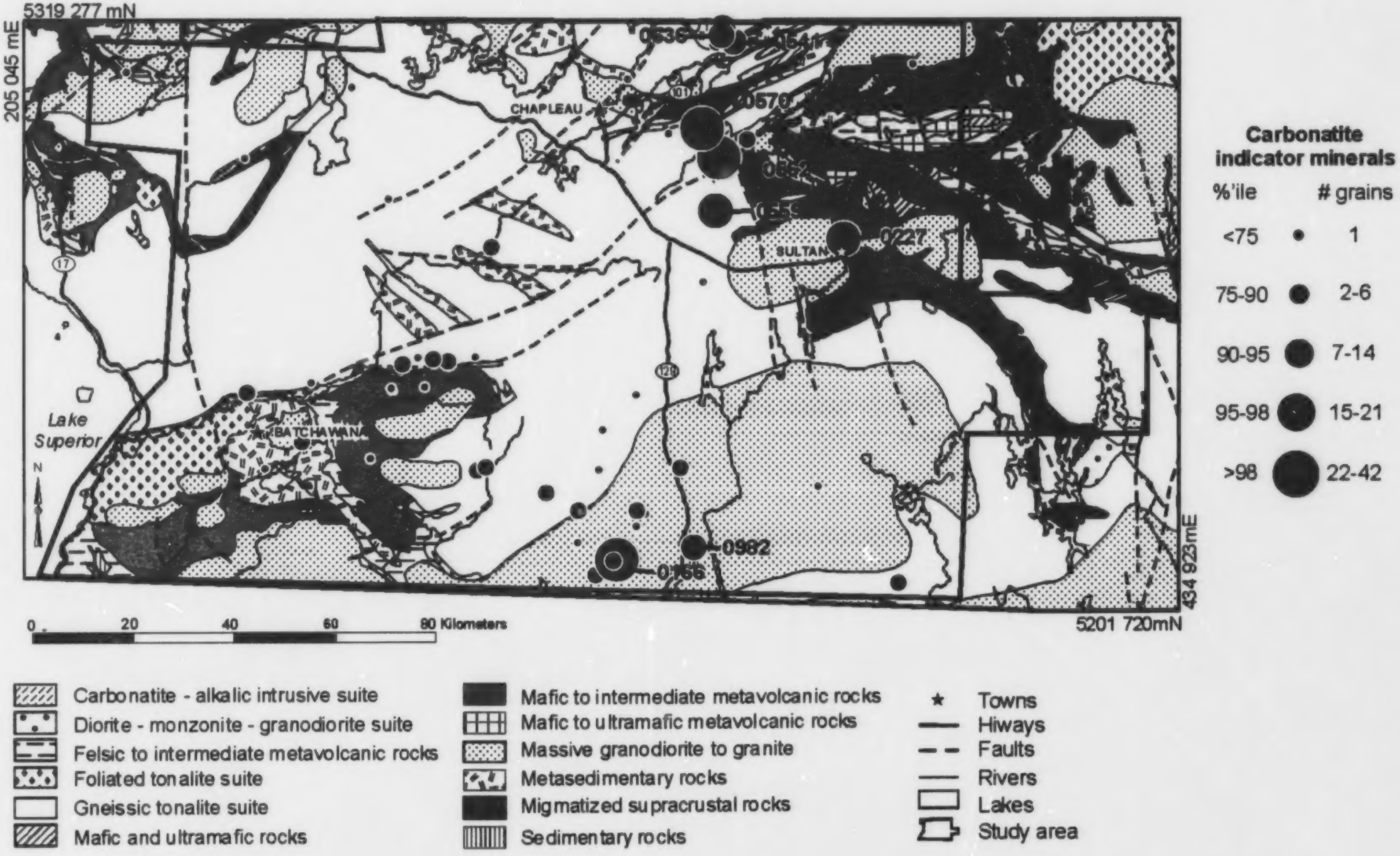

5319 277 mN
205 045 mE
434 923mE
5201 720mN
CHAPLEAU
SULTAN
BATCHAWANA
Lake Superior
N
17
101
129
0536
0541
0570
0562
0559
0227
0982
0166
0
20
40
60
80 Kilometers
Carbonatite indicator minerals
%'ile
# grains
<75
1
75-90
2-6
90-95
7-14
95-98
15-21
>98
22-42
Carbonatite - alkalic intrusive suite
Diorite - monzonite - granodiorite suite
Felsic to intermediate metavolcanic rocks
Foliated tonalite suite
Gneissic tonalite suite
Mafic and ultramafic rocks
Mafic to intermediate metavolcanic rocks
Mafic to ultramafic metavolcanic rocks
Massive granodiorite to granite
Metasedimentary rocks
Migmatized supracrustal rocks
Sedimentary rocks
Towns
Hiways
Faults
Rivers
Lakes
Study area

Figure 23. Regional distribution of carbonatite indicator minerals based on raw data.

Samples containing a large number and a variety of carbonatite indicators are deemed important in this study. Anomalous samples for carbonatite indicators appear to be located in the surrounding region or down ice from the known alkalic complexes (Figure 23). These results are favorable, because they indicate that the alluvium samples have a relatively proximal source. Sample KAP-0227 contains 20 perovskite minerals and does not seem to be associated with a known alkalic complex. The Lackner Lake alkalic complex, located approximately 30km to the northeast, is the closest known alkalic. Although the anomaly is not as significant as the others, because this sample lacks a variety of carbonatite indicator minerals, further exploration is suggested in this region.

Gold

Gold grains recovered from overburden samples are commonly silt sized and vary in grain shape depending on the distance of transport from their source area. Gold grain shapes can be used to determine the transport history of the sample. Three gold grain appearances are recognized: 1) pristine; 2) modified; and 3) reshaped. In general, pristine grains indicate little distance of transport from the source area and reshaped grains indicate a longer distance of transport.

The number of gold grains recovered in this study is small, however, results are comparable to gold grain results from modern alluvium studies completed to the west in the Wawa region (Morris et al. 1994) and to the east in the Swayze greenstone belt (Bernier 1994).

A total of 310 gold grains were recovered from samples within the study area (Appendix G). Of these grains, 285 were reshaped, 18 were modified and 7 were pristine. The reshaped grains recovered from this study suggest some distance of transport.

Areas containing higher numbers of modified, pristine or total gold grains are present in this study. Figure 24 shows 5 areas and several individual sites containing higher numbers of gold grains in this study, based on raw data. Modified and pristine gold grains are also present in these areas (Figure 25). It should be noted that the sites containing higher numbers of gold grains in the Chapleau area are low in comparison with other areas, such as the Abitibi greenstone belt. Caution is warranted in the exploration value of the gold grain data presented herein.

The area surrounding Wawa, to the northwest, adjacent to the study area and the area near Gogama east of the study area, have been explored several times and to varying degrees for gold. Gold showings (Rupert 1979, Sage 1993, Lavigne 1979, Goodwin 1965, Donovan 1965, Bernier 1994) indicate that known gold mineralization is strongly controlled by zones of dislocation (i.e., fault and shear zones). Many sites containing gold grains within the Chapleau study area also seem to be associated with regional faults (Figure 24).

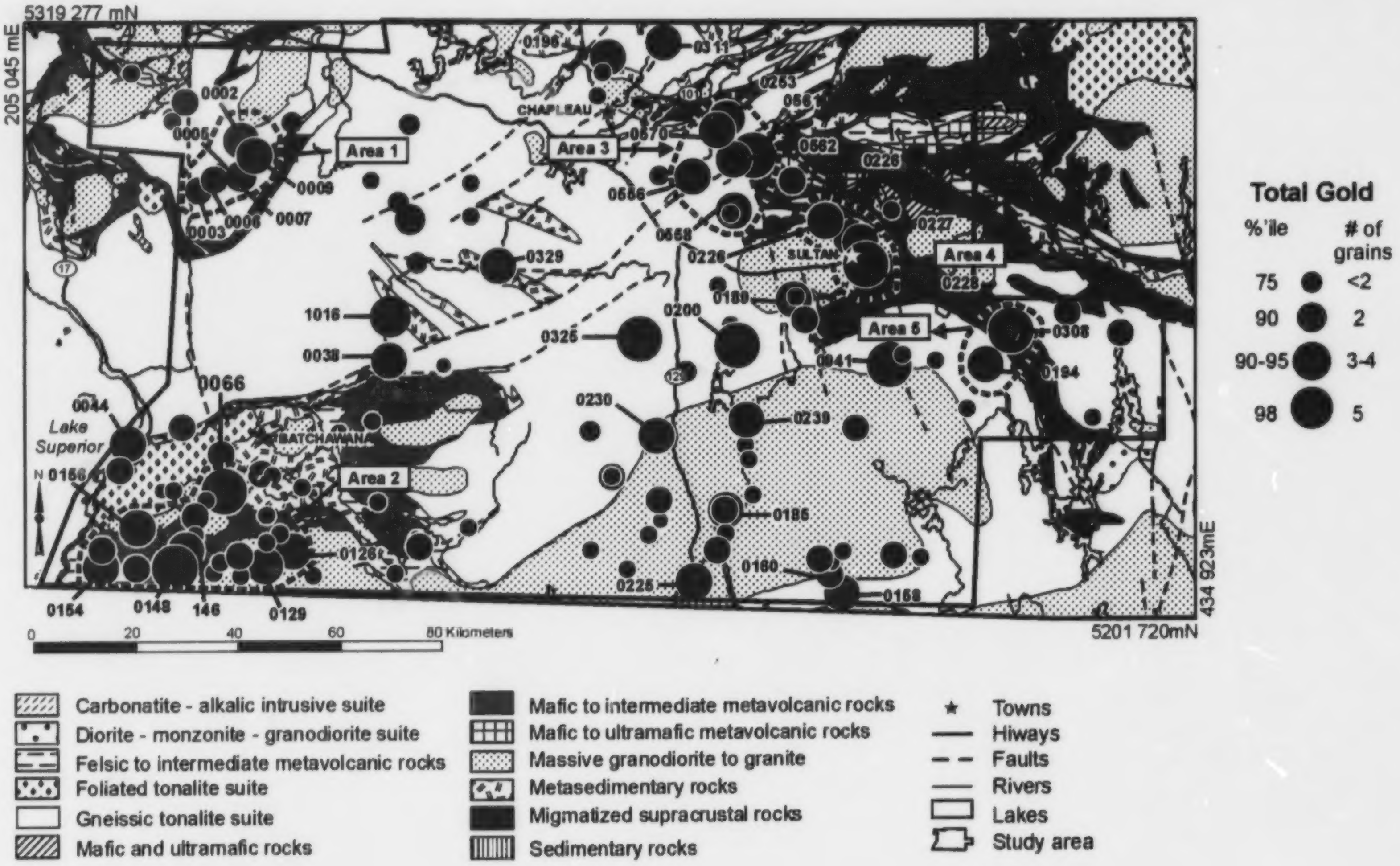

5319 277 mN
205 045 mE
434 923mE
5201 720mN
Area 1
Area 2
Area 3
Area 4
Area 5
CHAPLEAU
SULTAN
BATCHAWANA
Lake Superior
0002
0005
0009
0007
0006
0003
0329
1016
0038
0066
0044
0156
0154
0148
146
0129
0126
0196
0311
0253
056
0570
0562
0226
0586
0558
0227
0228
0180
0200
0325
0941
0308
0194
0230
0239
0185
0160
0168
0225
0 20 40 60 80 Kilometers
Total Gold
%'ile
# of grains
75 <2
90 2
90-95 3-4
98 5
Carbonatite - alkalic intrusive suite
Diorite - monzonite - granodiorite suite
Felsic to intermediate metavolcanic rocks
Foliated tonalite suite
Gneissic tonalite suite
Mafic and ultramafic rocks
Mafic to intermediate metavolcanic rocks
Mafic to ultramafic metavolcanic rocks
Massive granodiorite to granite
Metasedimentary rocks
Migmatized supracrustal rocks
Sedimentary rocks
Towns
Hiways
Faults
Rivers
Lakes
Study area

Figure 24. Regional distribution of total gold grains, based on raw data.

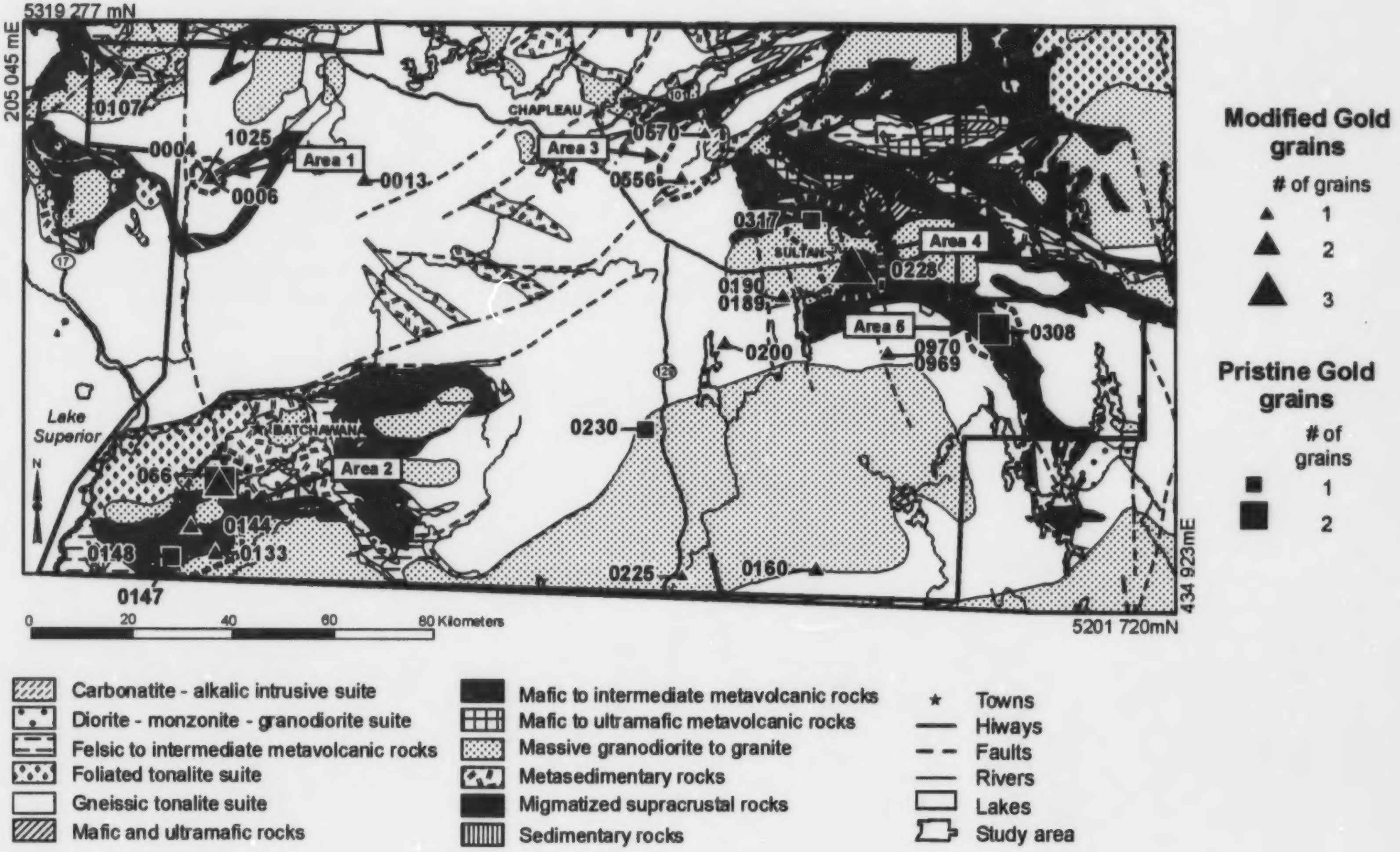

5319 277 mN
205 045 mE
434 923mE
5201 720mN
0107
0004
1025
0006
Area 1
0013
CHAPLEAU
Area 3
0570
0556
101
0317
SULTAN
Area 4
0228
0190
0189
Area 5
0308
0200
0970
0969
17
129
0230
Lake Superior
BATCHAWANA
Area 2
066
0144
0148
0133
0147
0225
0160
N
0
20
40
60
80 Kilometers
Modified Gold grains
# of grains
1
2
3
Pristine Gold grains
# of grains
1
2
Carbonatite - alkalic intrusive suite
Diorite - monzonite - granodiorite suite
Felsic to intermediate metavolcanic rocks
Foliated tonalite suite
Gneissic tonalite suite
Mafic and ultramafic rocks
Mafic to intermediate metavolcanic rocks
Mafic to ultramafic metavolcanic rocks
Massive granodiorite to granite
Metasedimentary rocks
Migmatized supracrustal rocks
Sedimentary rocks
Towns
Hiways
Faults
Rivers
Lakes
Study area

Figure 25. Regional distribution of pristine and modified gold grains, based on raw data.

Conclusions

Data obtained from modern alluvium sampling can be used to interpret heavy mineral signatures in the Chapleau area. Results from the study reveal several sites favourable for kimberlite and base metal exploration.

Three "G10" Cr-pyrope garnet, 2 diamond inclusion field chromites, 1 diamond intergrowth field chromite and several other kimberlite indicator minerals including: "G9" Cr-pyrope garnet; eclogitic garnets; megacrystic garnets; kimberlitic Cr-diopsides; Mg-ilmenites and forsteritic olivines have been recovered from modern alluvium samples. Several areas are identified here as being favourable for kimberlite exploration. However, a degree of caution should be employed in the interpretation of the data since transport mechanisms and dispersion characteristics for KIMs within the secondary environment may be complex.

Results for metamorphic/magmatic massive sulphide indicator minerals for volcanogenic massive sulphide and Ni-Cu sulphide deposits revealed a correlation with regional faults associated with the Kapuskasing Structural Zone. Gold grains also seemed to have an association with regional faults.

Acknowledgements

The authors would like to thank C.L. Baker for providing an excellent review of the manuscript, as well as Tom Morris and Stu Averill for their comments regarding the data. Sandra Pitre is thanked for her perseverance in the microprobe lab.

Samples were collected by W.A. Hubacheck Consultants Ltd. under contract to the OGS. Overburden Drilling Management performed the heavy mineral processing under contract to the OGS and Ontario Geoscience Laboratories in Sudbury performed the microprobe analysis.

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APPENDIX A: Sample Locations by UTM Coordinates (Grid 17, NAD 83) and Townships.

Sample # KAP-	Easting	Northing	Township
0001	240814	5308354	Noganosh
0002	246875	5295580	Roy
0003	238567	5285801	Suganaqueb
0004	240672	5288381	Suganaqueb
0005	242576	5288502	Suganaqueb
0006	241582	5288006	Suganaqueb
0007	246666	5288660	Suganaqueb
0008	244972	5290826	Suganaqueb
0009	249407	5292661	Tabobondung
0010	248867	5291724	Tabobondung
0011	260894	5287906	Waswa
0012	257534	5289246	Tabobondung
0013	272186	5287796	Wawia
0014	277845	5283646	Windego
0015	277527	5283581	Windego
0016	279790	5280192	Beilhartz
0017	281215	5280180	Beilhartz
0018	232821	5305773	Nebonaionquet
0019	231248	5301534	Restoule
0020	233187	5300319	Restoule
0021	233466	5299441	Restoule
0022	230571	5296236	Restoule
0023	222004	5299616	Redsky
0024	221913	5297904	Redsky
0025	225324	5297642	Redsky
0026	225268	5297569	Redsky
0027	235965	5303211	Restoule
0031	254303	5247551	Loach
0032	252738	5246529	Loach
0033	250517	5246441	Loach
0034	249396	5245070	Loach
0035	282672	5250234	Moen
0036	280274	5250746	Moen
0037	276184	5252603	Moen
0038	275756	5252610	Moen
0039	271436	5252931	McParland
0040	271963	5249912	McParland
0041	267897	5249830	McParland
0042	262139	5245053	McAughey
0043	262060	5247175	McAughey
0044	224709	5236449	Slater
0045	220242	5230008	Slater
0046	231873	5231456	Smilsky
0047	232373	5232829	Smilsky
0048	223153	5231126	Slater
0049	226406	5232192	Slater
0050	242831	5234205	Tolmonen
0051	241139	5232823	Tolmonen
0052	227709	5226199	Nicolet

Sample # KAP-	Easting	Northing	Township
0053	231260	5227228	Smilsky
0054	233555	5227217	Smilsky
0055	234023	5224181	Nicolet
0056	226585	5219908	Nicolet
0057	227791	5220857	Nicolet
0058	235231	5239531	Peever
0059	214004	5217883	(none)
0060	266234	5237558	Running
0061	266940	5237902	Running
0062	267379	5237933	Running
0063	265839	5238477	Running
0064	262870	5237560	Runnals
0065	262653	5237337	Runnals
0066	243401	5226959	Tolmonen
0067	250653	5230355	Tronsen
0068	258614	5227794	Vibert
0069	220730	5220964	Kincaid
0070	329091	5221248	Jessiman
0071	328737	5221036	Jessiman
0072	330352	5218625	Jessiman
0073	326868	5218534	Jessiman
0074	326506	5218262	Jessiman
0075	323006	5214393	Maeck
0076	326526	5231495	Foulds
0077	327082	5231119	Foulds
0078	327902	5227222	Foulds
0079	328574	5225039	Fouldsl
0080	319774	5225161	Ferrier
0081	321249	5222405	Havrot
0082	317538	5222681	Havrot
0083	315303	5221551	Havrot
0084	316087	5215580	Havrot
0085	315880	5211133	McNie
0086	316368	5208071	McNie
0087	281151	5217598	Gapp
0088	281647	5216103	Gapp
0089	277082	5213024	Lunkie
0090	276824	5210857	lunkie
0091	325699	5216907	Jessiman
0092	325393	5212868	Maeck
0093	322287	5217897	Havrot
0094	319315	5229563	Ferrier
0095	319376	5229705	Ferrier
0096	321379	5226799	Ferrier
0097	313556	5217818	Havrot
0098	315206	5215318	Havrot
0099	301684	5236675	Sherratt
0100	297826	5242522	Sherratt
0101	270145	5306086	Recollet

Sample # KAP-	Easting	Northing	Township
0102	270208	5305802	Recollet
0103	269935	5305586	Recollet
0104	256750	5279099	Beaudry
0105	255964	5279217	Beaudry
0106	256784	5276187	Beadry
0107	225556	5308816	Mitchipicoten
0118	245979	5307107	Noganosh
0119	241889	5302222	Roy
0120	239929	5304582	Noganosh
0121	246679	5301665	Roy
0122	241082	5297830	Roy
0123	256623	5213747	Grenoble
0124	260803	5210597	Grenoble
0125	260839	5210518	Grenoble
0126	256851	5215261	Grenoble
0127	252135	5213916	Brule
0128	252344	5213229	Brule
0129	251358	5212452	Brule
0130	248264	5211419	Brule
0131	246566	5210584	Brule
0132	241342	5211172	Wishart
0133	242597	5213169	Wishart
0134	246382	5214440	Brule
0135	251177	5217671	Olsen
0136	252844	5230097	Tronsen
0137	253301	5230315	Tronsen
0138	251811	5231976	Tronsen
0139	247652	5228738	Tronsen
0140	239905	5225291	Norberg
0141	238758	5224798	Norberg
0142	237764	5222058	Norberg
0143	238176	5219409	Norberg
0144	237705	5218447	Norberg
0145	237620	5217019	Norberg
0146	235960	5215514	Wishert
0147	233405	5212692	Palmer
0148	233748	5212120	Palmer
0149	226350	5212015	Ryan
0150	254291	5218697	Olsen
0151	251641	5222312	Olsen
0152	253154	5218760	Olsen
0153	251645	5217010	Olsen
0154	219419	5212246	Kincaid
0155	219643	5215621	(none)
0156	379104	5206988	Parrott
0157	374564	5214079	McKeough
0158	364324	5206668	Nuttall
0159	362704	5210033	Nuttall
0160	362004	5210368	Nuttall

Sample # KAP-	Easting	Northing	Township
0161	379854	5213659	McKeough
0162	362204	5212869	Nuttall
0163	369804	5215219	Leluk
0164	360004	5213419	Morningstar
0165	318806	5208818	McNic
0166	322945	5211778	Maeck
0167	322330	5211588	McNic
0168	323355	5214238	Maeck
0169	275047	5240319	Schenbri
0170	268762	5232459	Way-White
0171	273907	5232038	Way-White
0172	271904	5234314	Running
0173	284867	5216828	Gaudry
0174	283457	5217303	Gapp
0175	273501	5224848	Way-White
0176	286857	5233789	Bracci
0177	308292	5223275	Handleman
0178	302926	5218018	Handleman
0179	335645	5230009	Gaunt
0180	336968	5225335	Gaunt
0181	344042	5214384	Laughren
0182	359032	5216367	Lawlor
0183	346874	5226015	Gilbertson
0184	345855	5226169	Gilbertson
0185	341628	5223040	Lanc
0186	341305	5223069	Lanc
0187	333844	5250294	Birch
0188	331511	5253010	Hutcheon
0189	355014	5264274	Neelands
0190	355453	5264832	Neelands
0191	357532	5267533	Neelands
0192	389228	5240694	Hubbard
0193	389061	5242775	Fonst
0194	392744	5251487	Fonst
0195	391003	5244159	Fonst
0196	318697	5311738	Marshall
0197	316328	5308968	Panet
0198	341519	5259194	Langlois
0199	342553	5259459	Lynch
0200	343865	5255274	Lynch
0201	282545	5241734	Shembri
0202	281477	5240256	Shembri
0203	295137	5229537	Butcher
0204	296961	5230160	Butcher
0205	298944	5226247	Butcher
0206	297176	5224032	Hoffman
0207	294879	5221802	Hoffman
0208	293265	5220387	Gaudry
0209	291249	5219801	Gaudry

Sample # KAP-	Easting	Northing	Township
0210	291045	5219800	Gaudry
0211	297996	5212218	Pine
0212	304388	5213824	McIlveen
0213	305806	5211068	McIlveen
0214	312480	5220120	Handleman
0215	288400	5217415	Gaudry
0216	286405	5225769	Bracci
0217	293125	5213318	Nahwegezhic
0218	297509	5209587	Pine
0219	312178	5219922	Handleman
0220	305804	5215307	McIlveen
0221	286172	5220517	Gaudry
0222	341533	5218454	Lane
0223	339864	5215249	Lane
0224	337506	5211860	Martel
0225	335351	5209043	Martel
0226	366304	5276319	Kaplan
0227	368129	5275390	Kaplan
0228	369180	5271046	Wakami
0229	369096	5268574	Wakami
0230	328094	5237670	Cassidy
0231	333868	5237726	Deans
0232	323051	5245269	Beckett
0233	326805	5244596	Bernier
0234	327586	5243795	Bernier
0235	346240	5239191	Drea
0236	345385	5235708	Drea
0237	347490	5230363	Gilbertson
0238	346150	5232928	Gilbertson
0239	345615	5240699	Drea
0240	349233	5246297	Brownsall
0241	334488	5254880	Langlois
0242	321244	5258985	Whitehead
0243	324654	5253935	Hutcheon
0244	333327	5264407	Reany
0245	363069	5287231	Greenlaw
0246	365391	5285480	Greenlaw
0247	366100	5283213	Greenlaw
0248	359135	5286436	Tooms
0249	358431	5275219	Eisenhower
0250	350869	5278761	Eisenhower
0252	354939	5312981	Sandy
0253	341926	5299642	McNaught
0254	322006	5294940	Chapleau
0255	372614	5284142	Cunningham
0256	363148	5281770	Greenlaw
0257	354722	5287353	Tooms
0258	353205	5281813	Tooms
0259	320637	5291689	Chappise

Sample # KAP-	Easting	Northing	Township
0260	357110	5260273	Kelsey
0261	355604	5257819	Kelsey
0262	342746	5262806	Storm
0263	327821	5268713	Kalen
0264	307487	5257300	Vondette
0265	306194	5255999	Vondette
0266	302216	5263774	Genier
0267	302482	5269356	Genier
0268	285965	5298357	Topham
0269	301006	5302319	Hoey
0270	256275	5295686	Sampson
0271	253793	5302084	Sampson
0272	266454	5297799	Saunders
0273	273830	5283868	Wawia
0274	260111	5274092	Beaupalant
0275	261935	5267247	Eaket
0276	269795	5274627	Behmann
0278	278812	5312910	Cosens
0301	344985	5252731	Bonnsall
0302	381052	5267685	Hong Kong
0303	384717	5280694	Fawn
0304	379372	5275390	Blamey
0305	419258	5257641	Smuts
0306	408809	5261692	Arbutus
0307	400915	5256280	Carew
0308	397729	5257994	Cavell
0309	415337	5243263	Hollinger
0310	413756	5240980	Margaret
0311	329574	5315695	D'arcy
0313	341405	5305791	Borden
0314	348960	5295181	Lockner
0315	374246	5281616	Cunningham
0316	365924	5279907	Kaplan
0317	361196	5279610	Kaplan
0318	359523	5296721	Halcrow
0319	344925	5279428	DeGaulle
0320	316658	5304129	Panet
0321	320785	5304882	Panet
0322	356747	5254722	Kelsey
0323	352420	5257458	Kelsey
0324	340140	5267109	Storm
0325	324820	5256668	Hutcheon
0326	306772	5251318	Patenande
0327	303343	5256839	Kosny
0328	312253	5271495	Jeffries
0329	297203	5271097	Genier
0330	298270	5295568	Hoey
0331	303846	5296417	Caouette
0332	253643	5294878	Sampson

Sample # KAP-	Easting	Northing	Township
0333	256694	5299236	Sampson
0334	259500	5301217	Saunders
0335	269779	5296183	Shawkence
0336	263071	5276857	Beauparlant
0337	263739	5272776	Eaket
0338	265851	5270685	Eaket
0340	279005	5316015	D'Avaugour
0434	326238	5285642	Daoust
0435	326751	5284785	Daoust
0436	302421	5281520	Bordeleau
0437	300881	5288136	Dalmas
0438	295748	5290618	Dalmas
0439	291777	5287145	Crepieul
0440	294792	5288131	Crepieul
0441	289014	5284933	Wendigo
0442	288384	5285407	Wendigo
0443	298644	5278607	Bordeleau
0444	298665	5277094	Bordeleau
0445	295691	5274024	Bordeleau
0446	300109	5281249	Bordeleau
0447	307817	5270332	Green
0448	307392	5268850	Green
0449	296947	5267471	Genier
0450	297991	5273960	Bordeleau
0475	284606	5288670	Windego
0476	278709	5298703	Topham
0477	297314	5300635	Hoey
0478	312068	5299951	Caouette
0479	278340	5245634	Moen
0480	278018	5246027	Moen
0481	281114	5245797	Moen
0482	282246	5245526	Moen
0483	283095	5245934	Moen
0484	284765	5246214	Moen
0485	288169	5246390	Moen
0486	290204	5244355	Scriven
0487	294845	5252282	Kosny
0488	297271	5252342	Neill
0489	299114	5245981	Neill
0490	287851	5244709	Moggy
0491	296825	5253109	Neill
0492	292674	5252599	Moggy
0493	285073	5250418	Moen
0494	283006	5252573	Moen
0495	283408	5252126	Moen
0496	273601	5263160	Hallett
0497	279718	5254780	Hammond
0498	281162	5271787	Engstorm
0499	279840	5271037	Engstorm

Sample # KAP-	Easting	Northing	Township
0500	278935	5270338	Engstorm
0514	300562	5314812	Bliss
0515	304459	5315503	Hill
0524	355553	5301835	Crockett
0525	357004	5305196	Crockett
0526	363750	5306190	Raney
0527	364628	5309661	Raney
0528	277129	5301944	Shawkence
0529	281507	5301669	Topham
0530	280524	5302403	Topham
0531	278551	5296422	Topham
0532	279729	5298709	Topham
0535	317695	5308851	Panet
0536	295382	5287976	Crepieul
0537	288086	5281790	Blackburn
0538	289375	5280654	Blackburn
0539	291857	5280670	Blackburn
0540	291684	5282318	Crepieul
0541	346241	5314714	Chewett
0542	346023	5311412	Chewett
0543	342535	5311972	Chewett
0544	335334	5309483	Borden
0545	282195	5274321	Beilhartz
0546	283781	5273910	Beilhartz
0547	293108	5271965	Fitzsimmons
0548	289225	5271989	Fitzsimmons
0549	294595	5284082	Crepieul
0550	299406	5277789	Bordeleau
0551	288607	5288869	Windego
0552	287714	5284604	Crepieul
0553	313594	5270547	Jeffries
0554	315992	5271208	Jeffries
0555	318373	5272915	Jeffries
0556	325782	5272744	Dupuis
0558	343272	5281634	DeGaulle
0559	342635	5281070	DeGaulle
0560	328664	5288501	Daoust
0561	346987	5292360	Lackner
0562	343251	5291606	Lackner
0566	335198	5288363	Halsey
0567	346153	5297835	Lackner
0568	346233	5300419	Lackner
0569	340831	5304119	Borden
0570	339976	5297403	McNaught
0574	333243	5296458	McNaught
0575	337034	5291500	Halsey
0576	332248	5308026	Cochrane
0577	335054	5307260	Borden
0578	325153	5307393	Cochrane

Sample # KAP-	Easting	Northing	Township
0589	357945	5317397	Sandy
0598	378168	5291244	Swayze
0599	375804	5289835	Cunningham
0600	379186	5292716	Swayze
0601	275858	5267776	Emiry
0602	274321	5262692	Hallett
0603	355398	5293337	Halcrow
0604	355442	5291731	Halcrow
0605	359255	5293619	Halcrow
0606	376566	5300893	Rollo
0607	381071	5308495	Coppell
0630	342870	5314526	Chewett
0631	341677	5316547	McGee
0635	344045	5317398	Chewett
0636	343843	5316019	Chewett
0655	377986	5312462	Biggs
0701	382649	5291483	Dore
0711	368666	5317560	Hellyer
0712	366742	5315222	Hellyer
0715	370210	5308104	Raney
0716	367621	5306515	Raney
0717	377281	5308601	Rollo
0718	381990	5310344	Whigham
0719	382584	5305277	Coppel
0790	293585	5303206	Peters
0939	378841	5254085	Singapore
0940	373798	5251360	Burr
0941	373783	5251426	Burr
0951	373075	5234837	Edighoffer
0952	368153	5232816	Grossman
0953	362796	5234778	Eaton
0954	365204	5230719	Grossman
0955	351988	5229069	Gisborn
0956	356659	5221727	Lawlor
0957	359639	5219301	Lawlor
0958	362965	5226347	Grossman
0959	379104	5227588	Guindon
0960	377729	5221726	McKeough
0961	364409	5223872	Grossman
0962	366005	5217808	Leluk
0963	364604	5214809	Leluk
0964	352500	5207909	Morningstar
0965	343826	5211172	Meen
0966	333388	5218977	Lang
0967	328780	5211751	Maeck
0968	382874	5252253	Ceylon
0969	376370	5253414	Singapore
0970	376366	5253288	Singapore
0971	379879	5244809	Burr

Sample # KAP-	Easting	Northing	Township
0972	371253	5241811	Eaton
0973	367104	5239055	Eaton
0974	365899	5241962	Eaton
0975	360527	5237849	Dukszta
0976	357689	5231688	Gisborn
0977	355848	5229435	Gisborn
0978	349559	5226746	Gilbertson
0979	355555	5215044	Lawlor
0980	361179	5222632	Lawlor
0981	337482	5220332	Lane
0982	338219	5214275	Martel
0983	337445	5240139	Deans
0984	323207	5249072	Beckett
0985	307647	5239788	Carton
0986	298334	5254754	Kosny
0987	301843	5256281	Kosny
0988	326911	5221491	Jessiman
0989	318227	5226249	Ferrier
0990	308931	5225123	Ewen
0991	299019	5221796	Hoffman
0992	320140	5237609	Carruthers
0993	315070	5238715	Carruthers
0994	316881	5243320	Carruthers
0995	289429	5251227	Moggy
0996	283774	5253113	Moen
0997	280473	5244815	Shembri
0998	272483	5240754	Running
0999	269389	5242017	Running
1000	270625	5216872	Desbiens
1001	423700	5257956	Smuts
1002	416912	5260986	Alcona
1003	385594	5273845	Fawn
1004	384295	5270784	Hong Kong
1005	381005	5273700	Fawn
1006	351376	5275437	Eisenhower
1007	334110	5256120	Langlois
1008	337929	5260821	Langlois
1009	337815	5260949	Langlois
1010	333782	5270585	Reaney
1011	354690	5245579	Brathwaite
1012	351449	5236045	Drea
1013	324662	5273640	Dupuis
1014	320757	5301289	Chapleau
1015	309104	5265996	Green
1016	275917	5261260	Hallet
1017	284309	5261415	Hammond
1018	320068	5298598	Chapleau
1019	342710	5302396	Gamey
1020	293510	5301428	Peters

Sample # KAP-	Easting	Northing	Township
1021	269320	5289595	Wawia
1022	262534	5286965	Waswa
1023	246104	5291256	Suganaqueb
1024	243410	5289480	Suganaqueb
1025	240801	5288094	Suganaqueb
1051	282623	5226447	Wlasy
1052	257795	5220464	Davieaux
1053	325661	5250243	Bernier
1054	313850	5241459	Carruthers
1055	300671	5249371	Neill
1056	300719	5249400	Neill
1057	294011	5244656	Moggy
1058	286326	5251748	Moggy
1059	285637	5244962	Moggy
1060	285570	5244848	Moggy
1061	275493	5244913	Shembri
1062	270668	5239994	Running
1063	270370	5238398	Running
1064	264960	5214149	Dablon
1065	260230	5235331	Runnalls
1066	257000	5232626	Vibert
1067	241993	5229698	Tolmonen
1068	239607	5229472	Tolmonen
1069	238097	5227950	Tolmonen
1070	244328	5282890	Beaudin
1071	240017	5280058	Beaudin
1072	247989	5278578	Beaudry
1073	250785	5274316	Beaudry
1074	246905	5272749	Cannard
1075	242712	5272608	Cannard
1076	239387	5272016	Cannard
1077	237632	5271639	Cannard
1078	237201	5265282	Bullock
1079	242112	5263547	Grootenboer
1080	237336	5259048	Grootenboer
1081	237825	5255442	Grootenboer
1082	237780	5255568	Grootenboer
1083	250475	5254429	Loach
1084	250427	5254358	Loach
1085	238223	5253617	Larson
1086	236407	5252587	Larson
1087	244571	5282718	Beaudin
1088	241642	5277764	Beaudin
1089	247260	5274573	Beaudry
1090	252948	5273423	Corboy
1091	243154	5272619	Cannard
1092	241200	5272203	Cannard
1093	237498	5267779	Bullock
1094	237938	5264075	Grootenboer
1095	237967	5264033	Grootenboer
1096	241063	5258386	Grootenboer
1097	239971	5250076	Larson
1098	245943	5249848	Larson
1101	220992	5217512	Ryan
1102	269816	5255635	Hallett
1103	268568	5257245	Hallett
1104	265406	5252930	McAughey
1105	256084	5252273	Loach
1106	254269	5250570	Loach
1107	250013	5250281	Loach
1108	254957	5255436	Grzela
1109	250259	5263726	Grzela
1110	257789	5267300	Eaket
1111	262791	5265363	Eaket
1112	273526	5268761	Emiry
1113	269470	5276380	Behmann

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APPENDIX B: Summary Counts of Picked and Estimated Numbers of Kimberlite Indicator Mineral Grains.

Summary of Abbreviations

CR:	Chromite
DC:	Cr-Diopside
FO:	Forsteritic Olivine
GO:	Eclogitic Garnet
GP:	Cr-Pyrope Garnet
IM:	Ilmenite
KIMs:	Kimberlite Indicator Minerals

*** Numbers in parentheses are an estimated number of grains within that sample

Note: Total KIMs includes picked and estimated grains.

Sample Number	Selected PseudoKIMs:*excluded from total			KIM Count																		
	1.0-2.0 mm	0.5-1.0 mm	0.25-0.5 mm	1.0 to 2.0 mm						0.5 to 1.0 mm						0.25 to 0.5 mm						
	*Low-Cr diopside	*Low-Cr diopside	*Low-Cr diopside	GP	GO	DC	IM	CR	FO	GP	GO	DC	IM	CR	FO	GP	GO	DC	IM	CR	FO	Total KIMs
KAP-			***																	***		
0001	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0002	0	2	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0004	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0005	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
0006	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0007	0	0	7	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	2
0008	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	4
0009	0	0	17	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	2
0010	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
0011	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0012	1	1	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
0013	0	1	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
0014	No Sample	0	6	No Sample						0	0	0	0	0	0	0	0	0	0	0	0	0
0015	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0016	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	1
0017	0	6	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0018	1	1	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
0019	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0020	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0021	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0022	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0023	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
0024	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0025	0	3	12	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	4
0026	0	2	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0027	0	5	10	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	2	0	11
0031	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
0032	0	1	26	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	9	0	10
0033	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
0034	0	6	20(35)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Sample Number	Selected PseudoKIMs:*excluded from total			KIM Count																		
	1.0-2.0 mm	0.5-1.0 mm	0.25-0.5 mm	1.0 to 2.0 mm						0.5 to 1.0 mm						0.25 to 0.5 mm						
	*Low-Cr diopside	*Low-Cr diopside	*Low-Cr diopside	GP	GO	DC	IM	CR	FO	GP	GO	DC	IM	CR	FO	GP	GO	DC	IM	CR	FO	Total KIMs
KAP-			***																	***		
0035	0	2	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0036	0	2	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
0037	0	0	9	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	2
0038	0	0	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3
0039	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
0040	0	0	10(20)	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	2
0041	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0042	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
0043	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0044	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0045	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0046	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0047	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
0048	0	0	30	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2
0049	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0050	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
0051	0	1	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
0052	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0053	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0054	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0055	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0056	0	No sample	0	0	0	0	0	0	0	No sample						0	0	0	0	0	0	0
0057	No sample	0	1	No Sample						0	0	0	0	0	0	0	0	0	0	0	0	0
0058	0	0	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0059	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0060	0	0	2	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
0061	0	0	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
0062	0	0	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0063	0	0	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0064	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7(10)	0	10
0065	0	0	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2

	Selected PseudoKIMs:*excluded from total			KIM Count																		
	1.0-2.0 mm	0.5-1.0 mm	0.25-0.5 mm	1.0 to 2.0 mm						0.5 to 1.0 mm						0.25 to 0.5 mm						
Sample Number	*Low-Cr diopside	*Low-Cr diopside	*Low-Cr diopside	GP	GO	DC	IM	CR	FO	GP	GO	DC	IM	CR	FO	GP	GO	DC	IM	CR	FO	Total KIMs
KAP-			***																	***		
0066	0	0	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
0067	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0068	0	1	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	4	0	5
0069	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0070	0	1	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3
0071	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3(10)	0	10
0072	0	0	10(30)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0073	0	0	15(50)	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
0074	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	1	3
0075	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0076	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0077	0	0	20(35)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	5(15)	0	1
0078	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2
0079	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
0080	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0081	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
0082	0	0	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0083	0	2	20(40)	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	5(10)	0	12
0084	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
0085	0	1	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0086	0	0	20(50)	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	3	0	5
0087	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0088	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0089	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0090	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0091	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0092	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0093	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0094	No sample	0	0	No Sample						0	0	0	0	0	0	0	0	0	0	0	0	0
0095	0	0	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0096	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	Selected PseudoKIMs:*excluded from total			KIM Count																		
	1.0-2.0 mm	0.5-1.0 mm	0.25-0.5 mm	1.0 to 2.0 mm						0.5 to 1.0 mm						0.25 to 0.5 mm						
Sample Number	*Low-Cr diopside	*Low-Cr diopside	*Low-Cr diopside	GP	GO	DC	IM	CR	FO	GP	GO	DC	IM	CR	FO	GP	GO	DC	IM	CR	FO	Total KIMs
KAP-			***																	***		
0097	0	0	20(75)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0098	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0099	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0100	0	2	7	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	4(10)	0	11
0101	0	0	14	0	0	0	0	0	0	0	0	0	1	0	0	3	0	0	0	1	0	5
0102	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	2
0103	0	0	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
0104	0	0	15 (30)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	4
0105	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
0106	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0107	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	3	0	4
0118	0	0	4	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	2
0119	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
0120	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0121	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0122	0	3	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0123	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0124	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0126	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	0	3
0127	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0128	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0129	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0130	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0131	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0132	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0133	0	1	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
0134	0	0	6	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	1	7(15)	0	21
0135	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0136	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0137	0	0	26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Sample Number	Selected PseudoKIMs:*excluded from total			KIM Count																		
	1.0-2.0 mm	0.5-1.0 mm	0.25-0.5 mm	1.0 to 2.0 mm						0.5 to 1.0 mm						0.25 to 0.5 mm						
	*Low-Cr diopside	*Low-Cr diopside	*Low-Cr diopside	GP	GO	DC	IM	CR	FO	GP	GO	DC	IM	CR	FO	GP	GO	DC	IM	CR	FO	Total KIMs
KAP-			***																	***		
0138	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0139	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
0140	0	0	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
0141	0	0	3	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
0142	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	3	0	4
0143	0	0	19	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	7(15)	0	16
0144	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0145	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0146	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0147	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3
0148	0	0	15(25)	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	10(25)	0	27
0149	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0150	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
0151	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0152	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
0153	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0154	No sample	0	1	No Sample						0	0	0	0	0	0	0	0	0	0	0	0	0
0155	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0156	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	29(50)	1	53
0157	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
0158	No sample	No sample	0	No Sample						No Sample						0	0	0	0	0	0	0
0159	No sample	0	0	No Sample						0	0	0	0	0	0	0	0	0	0	0	0	0
0160	0	0	3	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	8	0	10
0161	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
0162	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	2	7
0163	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	7
0164	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
0165	0	0	13	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	10(20)	1	21
0166	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	4	0	5
0167	0	0	17	0	0	0	0	0	0	0	0	0	1	2	0	0	0	0	0	3	0	6
0168	0	1	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	10(20)	0	22

Sample Number	Selected PseudoKIMs:*excluded from total			KIM Count																		
	1.0-2.0 mm	0.5-1.0 mm	0.25-0.5 mm	1.0 to 2.0 mm						0.5 to 1.0 mm						0.25 to 0.5 mm						
	*Low-Cr diopside	*Low-Cr diopside	*Low-Cr diopside	GP	GO	DC	IM	CR	FO	GP	GO	DC	IM	CR	FO	GP	GO	DC	IM	CR	FO	Total KIMs
KAP-			***																	***		
0169	0	1	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0170	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
0171	No sample	0	6	No Sample						0	0	0	0	0	0	0	0	0	0	0	0	0
0172	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
0173	0	1	2	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	6	0	7
0174	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0175	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0176	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0177	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3
0178	0	0	2	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	2
0179	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
0180	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	6
0181	No sample	No sample	0	No Sample						No Sample						0	0	0	0	0	0	0
0182	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0183	No sample	0	0	No Sample						0	0	0	0	0	0	0	0	0	0	0	0	0
0184	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	2
0185	No sample	0	1	No Sample						0	0	0	0	0	0	0	0	0	0	0	0	0
0186	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
0187	No sample	0	0	No Sample						0	0	0	0	0	0	0	0	0	0	0	0	0
0188	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0189	0	0	11	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	8	0
0190	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3
0191	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0192	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3
0193	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0194	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0195	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
0196	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0197	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0198	No sample	No sample	0	No Sample						No Sample						0	0	0	0	0	0	0
0199	No sample	0	0	No Sample						0	0	0	0	0	0	0	0	0	0	0	0	0

	Selected PseudoKIMs:*excluded from total			KIM Count																		
	1.0-2.0 mm	0.5-1.0 mm	0.25-0.5 mm	1.0 to 2.0 mm						0.5 to 1.0 mm						0.25 to 0.5 mm						
Sample Number	*Low-Cr diopside	*Low-Cr diopside	*Low-Cr diopside	GP	GO	DC	IM	CR	FO	GP	GO	DC	IM	CR	FO	GP	GO	DC	IM	CR	FO	Total KIMs
KAP-			***																	***		
0200	No sample	No sample	0	No Sample						No Sample						0	0	0	0	0	0	0
0201	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
0202	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0203	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0204	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
0205	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
0206	0	0	6	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
0207	0	1	4	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	2	0	3
0208	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
0209	0	0	5	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	6	0	7
0210	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0211	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0212	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0213	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0214	No sample	0	3	No Sample						0	0	0	0	0	0	0	0	1	0	0	0	1
0215	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0216	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0217	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	7
0218	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0219	No sample	0	0	No Sample						0	0	0	0	0	0	0	0	0	0	0	0	0
0220	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0221	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0222	No sample	0	5	No Sample						0	0	0	0	0	0	0	0	0	0	0	0	0
0223	No sample	0	0	No Sample						0	0	0	0	0	0	0	0	0	0	0	0	0
0224	No sample	0	1	No Sample						0	0	0	0	0	0	1	0	0	0	0	0	1
0225	0	0	3	0	0	0	0	0	0	0	0	0	2	0	1	2	1	1	0	0	8(20)	5
0226	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0227	0	0	13	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
0228	0	0	0	0	0	0	0	0	0	0	0	0	0	3	20(40)	0	0	6	0	1	10(4500)	10
0229	No sample	0	2	No Sample						0	0	0	0	0	0	0	0	0	0	0	0	0
0230	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Sample Number	Selected PseudoKIMs:*excluded from total			KIM Count																		
	1.0-2.0 mm	0.5-1.0 mm	0.25-0.5 mm	1.0 to 2.0 mm						0.5 to 1.0 mm						0.25 to 0.5 mm						
	*Low-Cr diopside	*Low-Cr diopside	*Low-Cr diopside	GP	GO	DC	IM	CR	FO	GP	GO	DC	IM	CR	FO	GP	GO	DC	IM	CR	FO	Total KIMs
KAP-			***																	***		
0231	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
0232	0	1	8	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	3	0	4
0233	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0234	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	5
0235	No sample	0	0	No Sample						0	0	0	0	0	0	0	0	0	0	0	0	0
0236	No sample	0	2	No Sample						0	0	0	0	0	0	0	0	0	0	0	1	0
0237	No sample	0	4	No Sample						0	0	0	0	0	0	0	0	0	0	0	0	0
0238	No sample	0	2	No Sample						0	0	0	0	0	0	0	0	0	0	0	0	0
0239	No sample	0	0	No Sample						0	0	0	0	0	0	0	0	0	0	0	0	0
0240	No sample	0	0	No Sample						0	0	0	0	0	0	0	0	0	0	0	0	0
0241	No sample	0	1	No Sample						0	0	0	0	0	0	0	0	0	0	0	1	0
0242	No sample	0	0	No Sample						0	0	0	0	0	0	0	0	0	0	0	1	0
0243	0	0	13	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	3	0
0244	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0245	No sample	No sample	0	No Sample						No Sample						0	0	0	0	0	0	0
0246	No sample	No sample	0	No Sample						No Sample						0	0	0	0	0	0	0
0247	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	2
0248	No sample	0	0	No Sample						0	0	0	0	0	0	0	0	0	0	0	0	0
0249	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15(25)	0	25
0250	No sample	0	0	No Sample						0	0	0	0	0	0	0	0	0	0	0	0	0
0252	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0253	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0254	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0255	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	3
0256	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0257	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
0258	No sample	0	1	No Sample						0	0	0	0	0	0	0	0	0	0	1	0	1
0259	No sample	0	1	No Sample						0	0	0	0	0	0	0	0	0	0	0	0	0
0260	No sample	0	5	No Sample						0	0	0	0	0	0	0	0	0	0	2	0	2
0261	No sample	No sample	0	No Sample						No Sample						0	0	0	0	0	0	0
0262	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0

Sample Number	Selected PseudoKIMs:*excluded from total			KIM Count																		
	1.0-2.0 mm	0.5-1.0 mm	0.25-0.5 mm	1.0 to 2.0 mm						0.5 to 1.0 mm						0.25 to 0.5 mm						
	*Low-Cr diopside	*Low-Cr diopside	*Low-Cr diopside	GP	GO	DC	IM	CR	FO	GP	GO	DC	IM	CR	FO	GP	GO	DC	IM	CR	FO	Total KIMs
KAP-			***																	***		
0263	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0264	0	0	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0265	0	0	10	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2	0	0	0	3
0266	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0267	No sample	0	0	No Sample						0	0	0	0	0	0	0	0	0	0	0	0	0
0268	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0269	0	0	20(70)	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
0270	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0271	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
0272	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0273	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0274	0	0	7	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
0275	0	1	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0276	0	0	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0278	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0301	No sample	0	0	No Sample						0	0	0	0	0	0	0	0	0	0	0	0	0
0302	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	2
0303	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25	0	25
0304	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	5
0305	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
0306	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0307	0	0	3	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	2	0	3
0308	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17(40)	0	40
0309	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3
0310	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0311	0	1	2	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	3	0
0313	No sample	0	0	No Sample						0	0	0	0	0	0	0	0	0	0	0	0	0
0314	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0315	No sample	0	0	No Sample						0	0	0	0	0	0	0	0	0	0	0	0	0
0316	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5(20)	5	20
0317	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1

Sample Number	Selected PseudoKIMs:*excluded from total			KIM Count																		
	1.0-2.0 mm	0.5-1.0 mm	0.25-0.5 mm	1.0 to 2.0 mm						0.5 to 1.0 mm						0.25 to 0.5 mm						
	*Low-Cr diopside	*Low-Cr diopside	*Low-Cr diopside	GP	GO	DC	IM	CR	FO	GP	GO	DC	IM	CR	FO	GP	GO	DC	IM	CR	FO	Total KIMs
KAP-			***																	***		
0318	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
0319	0	0	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	1	0	3
0320	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	7(15)	0	16
0321	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
0322	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	2
0323	No sample	No sample	0	No Sample						No Sample						0	0	0	0	0	0	0
0324	No sample	0	2	No Sample						0	0	0	0	0	0	0	0	0	0	0	2	0
0325	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0326	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	1	0	3
0327	0	2	7	0	0	0	0	0	0	0	0	0	0	2	0	1	0	0	0	5(25)	0	28
0328	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	1	0	3
0329	No sample	0	3	No Sample						0	0	0	0	0	0	0	0	0	0	0	0	0
0330	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0331	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
0332	0	0	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0333	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0334	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0335	0	0	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
0336	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0337	0	0	38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0338	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
0340	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
0434	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0435	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0436	0	4	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0437	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
0438	1	2	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0439	0	0	20(60)	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
0440	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0441	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0442	0	0	17	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0

Sample Number	Selected PseudoKIMs:*excluded from total			KIM Count																		
	1.0-2.0 mm	0.5-1.0 mm	0.25-0.5 mm	1.0 to 2.0 mm						0.5 to 1.0 mm						0.25 to 0.5 mm						
	*Low-Cr diopside	*Low-Cr diopside	*Low-Cr diopside	GP	GO	DC	IM	CR	FO	GP	GO	DC	IM	CR	FO	GP	GO	DC	IM	CR	FO	Total KIMs
KAP-			***																	***		
0443	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0444	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0445	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0446	0	0	50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0447	0	1	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	4
0448	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0449	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0450	No sample	0	0	No Sample						0	0	0	0	0	0	0	0	0	0	0	0	0
475	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
476	No sample	0	3	No Sample						0	0	0	0	0	0	0	0	0	0	0	0	0
477	0	12(30)	20(500)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
478	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0479	0	2	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0480	0	1	18	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2(5)	0	5
0481	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0482	0	0	38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0483	0	0	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5(20)	0	20
0484	0	0	48	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0485	No sample	0	1	No Sample						0	0	0	0	0	0	0	0	0	0	0	0	0
0486	0	0	7	0	0	0	0	0	0	0	0	1	1	0	0	1	1	0	0	0	0	3
0487	0	5	28	0	0	0	0	0	0	3	0	0	4	5	0	0	0	0	0	13(50)	0	62
0488	0	0	13	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
0489	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0490	0	0	20(35)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0491	0	0	9	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
0492	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
0493	0	0	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0494	No sample	0	1	No Sample						0	0	0	0	0	0	0	0	0	0	0	0	0
0495	No sample	0	10	No Sample						0	0	0	0	0	0	0	0	0	0	0	0	0
0496	No sample	No sample	0	No Sample						No Sample						0	0	0	0	0	0	0
0497	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Sample Number	Selected PseudoKIMs:*excluded from total			KIM Count																		
	1.0-2.0 mm	0.5-1.0 mm	0.25-0.5 mm	1.0 to 2.0 mm						0.5 to 1.0 mm						0.25 to 0.5 mm						
	*Low-Cr diopside	*Low-Cr diopside	*Low-Cr diopside	GP	GO	DC	IM	CR	FO	GP	GO	DC	IM	CR	FO	GP	GO	DC	IM	CR	FO	Total KIMs
KAP-			***																	***		
0498	No sample	0	0	No Sample						0	0	0	0	0	0	0	0	0	0	0	0	0
0499	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0500	No sample	0	3	No Sample						0	0	0	0	0	0	0	0	0	0	0	0	0
0514	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0515	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0524	0	0	9	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	1
0525	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0526	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0527	0	0	15	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	2
0528	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0529	0	1	25(60)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0530	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0531	0	0	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0532	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0535	0	0	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0536	0	5(20)	20(50)	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	2	0	4
0537	No sample	0	5	No Sample						0	0	0	0	0	0	1	0	0	0	0	0	1
0538	No sample	0	3	No Sample						0	0	0	0	0	0	0	0	0	0	0	0	0
0539	No sample	No sample	4	No Sample						No Sample						0	0	0	0	0	0	0
0540	0	2	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0541	0	0	25(35)	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	2
0542	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0543	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0544	No sample	0	0	No Sample						0	0	0	0	0	0	0	0	0	0	0	0	0
0545	No sample	0	0	No Sample						0	0	0	0	0	0	0	0	0	0	0	0	0
0546	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
0547	No sample	0	6	No Sample						0	0	0	0	0	0	0	0	0	0	0	0	0
0548	No sample	0	0	No Sample						0	0	0	0	0	0	0	0	0	0	0	0	0
0549	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0550	0	3	28	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	2
0551	0	2	25(40)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	4

Sample Number	Selected PseudoKIMs:*excluded from total			KIM Count																		
	1.0-2.0 mm	0.5-1.0 mm	0.25-0.5 mm	1.0 to 2.0 mm						0.5 to 1.0 mm						0.25 to 0.5 mm						
	*Low-Cr diopside	*Low-Cr diopside	*Low-Cr diopside	GP	GO	DC	IM	CR	FO	GP	GO	DC	IM	CR	FO	GP	GO	DC	IM	CR	FO	Total KIMs
KAP-			***																	***		
0552	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0553	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0554	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
0555	0	1	20(35)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	4	0	5
0556	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0558	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0559	0	1	15(25)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0560	No sample	0	0	No Sample						0	0	0	0	0	0	0	0	0	0	0	0	0
0561	No sample	0	0	No Sample						0	0	0	0	0	0	0	0	0	0	0	0	0
0562	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0566	No sample	0	1	No Sample						0	0	0	0	0	0	0	0	0	0	0	0	0
0567	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0568	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
0569	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0570	0	0	37	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2	2	3
0574	No sample	0	4	No Sample						0	0	0	0	0	0	0	0	0	0	0	0	0
0575	No sample	0	0	No Sample						0	0	0	0	0	0	0	0	0	0	0	0	0
0576	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
0577	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0578	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0589	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0598	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0599	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0600	No sample	0	3	No Sample						0	0	0	0	0	0	0	0	0	0	0	0	0
0601	0	0	10(60)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0602	No sample	0	6	No Sample						0	0	0	0	0	0	0	0	0	0	0	0	0
0603	No sample	0	0	No Sample						0	0	0	0	0	0	0	0	0	0	0	0	0
0604	0	1	7	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
0605	0	0	9	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	18(30)	0	31
0606	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0607	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Sample Number	Selected PseudoKIMs:*excluded from total			KIM Count																		
	1.0-2.0 mm	0.5-1.0 mm	0.25-0.5 mm	1.0 to 2.0 mm						0.5 to 1.0 mm						0.25 to 0.5 mm						
	*Low-Cr diopside	*Low-Cr diopside	*Low-Cr diopside	GP	GO	DC	IM	CR	FO	GP	GO	DC	IM	CR	FO	GP	GO	DC	IM	CR	FO	Total KIMs
KAP-			***																	***		
0630	0	1	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0631	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0635	0	0	10(25)	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
0636	0	0	12	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	3	0	4
0655	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0701	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0711	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0712	0	1	6	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	7(20)	0	21
0715	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18	0	18
0716	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	5
0717	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0718	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0719	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	1	4
0790	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0939	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0940	No sample	0	0	No Sample						0	0	0	0	0	0	0	0	0	0	0	0	0
0941	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0951	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
0952	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
0953	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0954	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0955	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
0956	No sample	0	0	No Sample						0	0	0	0	0	0	0	0	0	0	0	0	0
0957	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0958	0	0	20(40)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0959	No sample	No sample	0	No Sample						No Sample						0	0	0	0	0	0	0
0960	No sample	0	0	No Sample						0	0	0	0	0	0	0	0	0	0	0	0	0
0961	No sample	0	0	No Sample						0	0	0	0	0	0	0	0	0	0	0	0	0
0962	No sample	0	1	No Sample						0	0	0	0	0	0	0	0	0	0	0	0	0
0963	No sample	0	0	No Sample						0	0	0	0	0	0	0	0	0	0	0	0	0
0964	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Sample Number	Selected PseudoKIMs:*excluded from total			KIM Count																		
	1.0-2.0 mm	0.5-1.0 mm	0.25-0.5 mm	1.0 to 2.0 mm						0.5 to 1.0 mm						0.25 to 0.5 mm						
	*Low-Cr diopside	*Low-Cr diopside	*Low-Cr diopside	GP	GO	DC	IM	CR	FO	GP	GO	DC	IM	CR	FO	GP	GO	DC	IM	CR	FO	Total KIMs
KAP-			***																	***		
0965	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
0966	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0967	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
0968	No sample	0	2	No Sample						0	0	0	0	0	0	0	0	0	0	0	0	0
0969	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0970	No sample	0	1	No Sample						0	0	0	0	0	0	0	0	0	0	0	0	0
0971	No sample	0	0	No Sample						0	0	0	0	0	0	0	0	0	0	0	0	0
0972	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	7
0973	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0974	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0975	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0976	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	5	0	7
0977	No sample	0	0	No Sample						0	0	0	0	0	0	0	0	0	0	0	0	0
0978	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0979	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0980	No sample	0	10	No Sample						0	0	0	0	0	0	0	0	0	0	0	0	0
0981	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0982	No sample	0	7	No Sample						0	0	0	0	0	0	0	0	0	0	0	0	0
0983	No sample	0	1	No Sample						0	0	0	0	0	0	0	0	0	0	0	0	0
0984	0	0	9	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
0985	No sample	0	1	No Sample						0	0	0	0	0	0	0	0	0	0	0	0	0
0986	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0987	0	0	10(25)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0988	0	2	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0989	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0990	No sample	0	3	No Sample						0	0	0	0	0	0	0	0	0	0	0	0	0
0991	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
0992	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0993	No sample	0	0	No Sample						0	0	0	0	0	0	0	0	0	0	0	0	0
0994	0	0	10(25)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
0995	0	0	20(50)	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2	0	0	0	3

Sample Number	Selected PseudoKIMs: *excluded from total			KIM Count																	
	1.0-2.0 mm	0.5-1.0 mm	0.25-0.5 mm	1.0 to 2.0 mm						0.5 to 1.0 mm						0.25 to 0.5 mm					
	*Low-Cr diopside	*Low-Cr diopside	*Low-Cr diopside	GP	GO	DC	IM	CR	FO	GP	GO	DC	IM	CR	FO	GP	GO	DC	IM	CR	FO	Total KIMs
KAP-			***																	***		
0996	No sample	0	0	No Sample						0	0	0	0	0	0	0	0	0	0	0	0	0
0997	0	2	20(40)	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	4	0	5
0998	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0999	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
1000	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
1001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1002	No sample	No sample	0	No Sample						No Sample						0	0	0	0	0	0	0
1003	No sample	No sample	0	No Sample						No Sample						0	0	0	0	0	0	0
1004	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1005	No sample	No sample	0	No Sample												0	0	0	0	0	0	0
1006	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	3	3	4
1007	No sample	No sample	0	No Sample						No Sample						0	0	0	0	0	0	0
1008	No sample	No sample	0	No Sample						No Sample						0	0	0	0	0	0	0
1009	No sample	No sample	0	No Sample						No Sample						0	0	0	0	0	0	0
1010	0	1	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1011	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1012	0	1	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1013	No sample	No sample	0	No Sample						No Sample						0	0	0	0	0	0	0
1014	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1015	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1016	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1017	0	1	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1018	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1019	No sample	0	1	No Sample						0	0	0	0	0	0	0	0	0	0	0	0	0
1020	0	1	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
1021	No sample	No sample	No sample	No Sample						No Sample						No Sample						0
1022	No sample	No sample	0	No Sample						No Sample						0	0	0	0	0	0	0
1023	0	0	4	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
1024	0	2	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1025	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1051	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1052	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Sample Number	Selected PseudoKIMs:*excluded from total			KIM Count																		
	1.0-2.0 mm	0.5-1.0 mm	0.25-0.5 mm	1.0 to 2.0 mm						0.5 to 1.0 mm						0.25 to 0.5 mm						
	*Low-Cr diopside	*Low-Cr diopside	*Low-Cr diopside	GP	GO	DC	IM	CR	FO	GP	GO	DC	IM	CR	FO	GP	GO	DC	IM	CR	FO	Total KIMs
KAP-			***																	***		
1053	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1054	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
1055	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1056	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1057	0	0	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1058	0	0	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1059	1	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3
1060	0	2	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1061	0	2	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
1062	0	0	25(75)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1063	0	0	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
1064	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1065	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1066	0	1	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
1067	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1068	No sample	0	15	No Sample						0	0	0	0	0	0	0	0	0	0	0	0	0
1069	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1070	No sample	0	0	No Sample						0	0	0	0	0	0	0	0	0	0	0	0	0
1071	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1072	0	0	12	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	2
1073	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2
1074	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1075	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
1076	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1077	0	0	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1078	0	0	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1079	0	0	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
1080	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1081	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1082	No sample	0	10(30)	No Sample						0	0	0	0	0	0	0	0	0	0	0	0	0
1083	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Sample Number	Selected PseudoKIMs:*excluded from total			KIM Count																		Total KIMs
	1.0-2.0 mm	0.5-1.0 mm	0.25-0.5 mm	1.0 to 2.0 mm						0.5 to 1.0 mm						0.25 to 0.5 mm						
	*Low-Cr diopside	*Low-Cr diopside	*Low-Cr diopside	GP	GO	DC	IM	CR	FO	GP	GO	DC	IM	CR	FO	GP	GO	DC	IM	CR	FO	
KAP-			***																	***		
1084	No sample	0	5	No Sample						0	0	0	0	0	0	0	0	0	0	0	0	0
1085	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1086	0	0	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1087	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1088	No sample	No sample	0	No Sample						No Sample						0	0	0	0	0	0	0
1089	0	1	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1090	0	0	25(60)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1091	0	1	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
1092	0	0	16	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2
1093	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1094	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1095	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1096	0	0	20(30)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1097	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	3	0	4
1098	0	2	15(75)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
1101	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1102	0	0	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1103	No sample	0	0	No Sample						0	0	0	0	0	0	0	0	0	0	0	0	0
1104	No sample	0	0	No Sample						0	0	0	0	0	0	0	0	0	0	0	0	0
1105	No sample	0	16	No Sample						0	0	0	0	0	0	0	0	0	0	0	0	0
1106	0	1	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
1107	0	1	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	1
1108	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
1109	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
1110	0	0	20(30)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1111	No sample	0	0	No Sample						0	0	0	0	0	0	0	0	0	0	0	0	0
1112	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1113	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			TOTAL	0	0	0	0	0	0	7	0	4	33	39	15	51	6	38	6	316	40	923

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APPENDIX C: Kimberlite Indicator Minerals in 556 Modern Alluvium Samples from the Chapleau Area. Data is Presented as Raw and Normalized Values*.

Summary of Abbreviations

Kg:	Kilogram
GP:	Cr-Pyrope Garnet
R:	Raw
N:	Normalized
GO:	Eclogitic Garnet
CR:	Chromite
DIF:	Diamond Inclusion Field
Est.:	Estimated
L/K:	Lamprophyre and Kimberlite Field
OF:	Overlap Field
KIM:	Kimberlite Indicator Minerals
N-KIM:	Non-Kimberlite Indicator Minerals
Poss. KIM:	Possible Kimberlite Indicator Minerals
IM:	Ilmenite
DC:	Cr-Diopside
N-KIM (I-C):	Non-Kimberlite Indicator Mineral (Group I - Crustal Derived)
N-KIM (II-M):	Non- Kimberlite Indicator Minerals (Group II - Crust/Mantle Derived)
FO:	Forsteritic Olivine

* All data has been normalized by table weight feed (see Data Plotting Parameters-Appendix H)

** Where applicable, raw data has been adjusted to take grain count estimates (Est.) into consideration (see Data Plotting Parameters-Appendix H)

*** Grains picked do not necessarily reflect the total number of KIMs. Numbers in parentheses are an estimated number of grains present within that sample.

Sample	UTM		Table	Garnets												Chromite														
	East	North	Feed (Kg)	Picked	G9		G10		Megacrysts		Picked	Eclogitic		Crustal		Picked	DIF		Est. DIF		L/K		Est.L/K		OF		Est. OF		N-KIM	
KAP-				GP***	R	N*	R	N*	R	N*	GO***	R	N*	R	N*	CR***	R	N*	R**	N*	R	N*	R**	N*	R	N*	R**	N*	R	N*
0001	240814	5308354	8.2	0	0	0	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0002	246875	5295580	9.5	0	0	0	0	0	0	0	0	0	0	3	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0003	238567	5285801	10.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0004	240672	5288381	11.1	0	0	0	0	0	0	0	0	0	0	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0005	242576	5288502	9.5	0	0	0	0	0	0	0	0	0	0	3	5	1	0	0	0	0	0	0	0	0	1	2	0	0	0	0
0006	241582	5288006	10.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0007	246666	5288660	10.7	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	1	1	0	0	0	0	0	0	0	0
0008	244972	5290826	15.4	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	1	1	0	0	3	3	0	0	0	0
0009	249407	5292661	12.9	1	1	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1	0	0	0	0
0010	248867	5291724	13.8	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0011	260894	5287906	11.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0012	257534	5289246	12.3	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0013	272186	5287796	10.6	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2	3	0	0	0	0
0014	277845	5283646	14.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
0015	277527	5283581	15.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0016	279790	5280192	13.1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1	0	0	0	0
0017	281215	5280180	13.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0018	232821	5305773	9.4	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	2	0	0	0	0
0019	231248	5301534	11.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0020	233187	5300319	10.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0021	233466	5299441	17.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0022	230571	5296236	14.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0023	222004	5299616	12.2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0024	221913	5297904	7.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0025	225324	5297642	11.1	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0026	225268	5297569	8.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0027	235965	5303211	10.6	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0031	254303	5247551	8.8	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	2	0	0	0	0
0032	252738	5246529	8	0	0	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	8	15	0	0	0	0
0033	250517	5246441	8.2	0	0	0	0	0	0	0	0	0	0	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0034	249396	5245070	9.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0035	282672	5250234	13.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0036	280274	5250746	15	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0037	276184	5252603	11.6	1	1	1	0	0	0	0	0	1	1	0	0	1	0	0	0	0	0	0	0	0	1	1	0	0	0	0
0038	275756	5252610	14.7	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	2	2	0	0	1	1
0039	271436	5252931	9.4	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	2	0	0	0	0

Sample	Mg-ilmenite							Cr-diopside													Olivine					Total		Total	
	Picked	KIM		PseudoKIM		N-KIM		Picked	KIM		Est. KIM		N-KIM (I-C)		Est. (I-C)		N-KIM (II-M)		Est. (II-M)		Picked	FO>80		FO<80		KIM grains		grains	
KAP	IM***	R	N*	R	N*	R	N*	DC***	R	N*	R**	N*	R	N*	R**	N*	R	N*	R**	N*	FO***	R	N*	R	N*	R	N*	R	N*
0001	0	0	0	0	0	0	0	3	0	0	0	0	1	2	0	0	1	2	0	0	0	0	0	0	0	0	0	3	5
0002	0	0	0	0	0	0	0	8	5	8	0	0	2	3	0	0	1	2	0	0	0	0	0	0	0	5	8	11	17
0003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0004	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	3
0005	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	4	6
0006	0	0	0	0	0	0	0	8	0	0	0	0	2	3	0	0	6	9	0	0	0	0	0	0	0	0	0	8	12
0007	0	0	0	0	0	1	1	7	2	3	0	0	1	1	0	0	4	6	0	0	0	0	0	0	0	3	4	9	13
0008	0	0	0	0	0	0	0	3	1	1	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	5	5	7	7
0009	0	0	0	0	0	0	0	17	3	3	0	0	4	5	0	0	10	12	0	0	0	0	0	0	0	5	6	19	22
0010	0	0	0	0	0	1	1	10	3	3	0	0	3	3	0	0	7	8	0	0	0	0	0	0	0	4	4	15	16
0011	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
0012	0	0	0	0	0	1	1	27	9	11	0	0	4	5	0	0	12	15	0	0	0	0	0	0	0	9	11	26	32
0013	0	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	9	13	0	0	0	0	0	0	0	2	3	11	16
0014	0	0	0	0	0	0	0	6	0	0	0	0	3	3	0	0	2	2	0	0	0	0	0	0	0	1	1	6	6
0015	0	0	0	0	0	0	0	11	0	0	0	0	4	4	0	0	7	7	0	0	0	0	0	0	0	0	0	11	10
0016	1	0	0	1	1	1	1	1	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	1	1	4	5
0017	0	0	0	0	0	0	0	15	0	0	0	0	4	5	0	0	11	13	0	0	0	0	0	0	0	0	0	15	17
0018	0	0	0	0	0	0	0	7	1	2	0	0	3	5	0	0	3	5	0	0	0	0	0	0	0	2	3	8	13
0019	0	0	0	0	0	0	0	3	0	0	0	0	2	3	0	0	1	1	0	0	0	0	0	0	0	0	0	3	4
0020	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2	3	0	0	0	0	0	0	0	0	0	2	3
0021	0	0	0	0	0	0	0	6	1	1	0	0	0	0	0	0	5	4	0	0	0	0	0	0	0	1	1	6	5
0022	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0023	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0024	0	0	0	0	0	0	0	2	0	0	0	0	1	2	0	0	1	2	0	0	0	0	0	0	0	0	0	2	4
0025	2	0	0	2	3	0	0	15	3	4	0	0	7	9	0	0	6	8	0	0	0	0	0	0	0	4	5	19	26
0026	0	0	0	0	0	0	0	22	9	15	0	0	7	12	0	0	7	12	0	0	0	0	0	0	0	9	15	23	39
0027	9	0	0	8	11	1	1	15	7	10	0	0	1	1	0	0	6	8	0	0	0	0	0	0	0	7	10	23	33
0031	0	0	0	0	0	0	0	2	0	0	0	0	2	3	0	0	0	0	0	0	0	0	0	0	0	1	2	3	5
0032	0	0	0	0	0	0	0	27	3	6	0	0	6	11	0	0	18	34	0	0	0	0	0	0	0	11	21	35	66
0033	0	0	0	0	0	1	2	1	0	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	3	5
0034	0	0	0	0	0	0	0	26(35)	3	5	4	6	0	0	0	0	25	38	34	52	0	0	0	0	0	3	5	28	43
0035	0	0	0	0	0	0	0	13	1	1	0	0	4	4	0	0	7	8	0	0	0	0	0	0	0	1	1	12	13
0036	0	0	0	0	0	0	0	23	5	5	0	0	4	4	0	0	14	14	0	0	0	0	0	0	0	5	5	25	25
0037	0	0	0	0	0	0	0	9	2	3	0	0	1	1	0	0	6	8	0	0	0	0	0	0	0	5	6	12	16
0038	0	0	0	0	0	0	0	15	0	0	0	0	6	6	0	0	9	9	0	0	0	0	0	0	0	2	2	18	18
0039	0	0	0	0	0	0	0	6	0	0	0	0	4	6	0	0	2	3	0	0	0	0	0	0	0	1	2	7	11

Sample	UTM		Table	Garnets																Chromite																
	East	North	Feed (Kg)	Picked	G9		G10		Megacrysts		Picked	Eclogitic		Crustal		Picked	DIF		Est. DIF		L/K		Est.L/K		OF		Est. OF		N-KIM	
KAP-				GP***	R	N*	R	N*	R	N*	GO***	R	N*	R	N*	CR***	R	N*	R**	N*	R	N*	R**	N*	R	N*	R**	N*	R	N*
0040	271963	5249912	15	1	0	0	0	0	0	0	0	1	1	0	0	1	0	0	0	0	0	0	0	0	1	1	0	0	0	0
0041	267897	5249830	12.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0042	262139	5245053	14	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1	0	0	0	0
0043	262060	5247175	12	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0044	224709	5236449	15.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0045	220242	5230008	14.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0046	231873	5231456	11.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0047	232373	5232829	9.9	1	0	0	1	2	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0048	223153	5231126	16	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0049	226406	5232192	17.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0050	242831	5234205	17.4	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0051	241139	5232823	14	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1	0	0	0	0
0052	227709	5226199	13.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0053	231260	5227228	18.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0054	233555	5227217	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0055	234023	5224181	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0056	226585	5219908	18.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0057	227791	5220857	13.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0058	235231	5239531	17.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0059	214004	5217883	14.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0060	266234	5237558	9.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0061	266940	5237902	8.5	0	0	0	0	0	0	0	0	1	2	0	0	1	0	0	0	0	0	0	0	0	1	2	0	0	0	0
0062	267379	5237933	8.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0063	265839	5238477	8.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0064	262870	5237560	7.2	0	0	0	0	0	0	0	0	0	0	0	0	7(10)	0	0	0	0	0	0	0	0	6	13	9	18	0	0
0065	262653	5237337	10.5	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	1	1	0	0	0	0
0066	243401	5226959	12.5	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1
0067	250653	5230355	13.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0068	258614	5227794	10.4	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	1	1	0	0	4	6	0	0	0	0
0069	220730	5220964	14.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0070	329091	5221248	7.9	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	1	2	0	0	2	4	0	0	0	0
0071	328737	5221036	12.1	0	0	0	0	0	0	0	0	1	1	0	0	3(10)	0	0	0	0	0	0	0	0	3	4	10	12	0	0
0072	330352	5218625	15.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0073	326868	5218534	11.9	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0074	326506	5218262	14.4	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	2	2	0	0	0	0
0075	323006	5214393	15.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Sample	Mg-ilmenite							Cr-diopside													Olivine					Total KIM grains		Total grains	
	Picked	KIM		PseudoKIM		N-KIM		Picked	KIM		Est. KIM		N-KIM (I-C)		Est. (I-C)		N-KIM (II-M)		Est. (II-M)		Picked	FO>80		FO<80					
KAP	IM***	R	N*	R	N*	R	N*	DC***	R	N*	R**	N*	R	N*	R**	N*	R	N*	R**	N*	FO***	R	N*	R	N*	R	N*	R	N*
0040	0	0	0	0	0	0	0	10(20)	0	0	0	0	1	1	2	2	9	9	18	18	0	0	0	0	0	2	2	12	12
0041	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	2	2
0042	0	0	0	0	0	0	0	5	0	0	0	0	3	3	0	0	2	2	0	0	0	0	0	0	0	1	1	6	6
0043	0	0	0	0	0	0	0	10	0	0	0	0	5	6	0	0	6	8	0	0	0	0	0	0	0	0	0	12	15
0044	0	0	0	0	0	0	0	2	1	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	1	1	2	2
0045	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	6	6	0	0	0	0	0	0	0	0	0	6	6
0046	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2	3	0	0	0	0	0	0	0	0	0	2	3
0047	0	0	0	0	0	0	0	4	0	0	0	0	3	5	0	0	0	0	0	0	0	0	0	0	0	3	4	5	8
0048	0	0	0	0	0	0	0	30	2	2	0	0	6	6	0	0	22	21	0	0	0	0	0	0	0	4	4	32	30
0049	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	5	4	0	0	0	0	0	0	0	0	0	5	4
0050	0	0	0	0	0	0	0	5	0	0	0	0	3	3	0	0	2	2	0	0	0	0	0	0	0	1	1	6	5
0051	0	0	0	0	0	0	0	8	0	0	0	0	5	5	0	0	3	3	0	0	0	0	0	0	0	1	1	9	10
0052	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0053	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	1	1
0054	0	0	0	0	0	0	0	7	1	1	0	0	2	2	0	0	4	3	0	0	0	0	0	0	0	1	1	7	6
0055	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
0056	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0057	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	1	1
0058	0	0	0	0	0	0	0	16	2	2	0	0	2	2	0	0	13	11	0	0	0	0	0	0	0	2	2	17	15
0059	0	0	0	0	0	0	0	8	1	1	0	0	2	2	0	0	6	6	0	0	0	0	0	0	0	1	1	9	9
0060	0	0	0	0	0	0	0	3	0	0	0	0	3	5	0	0	0	0	0	0	0	0	0	0	0	0	0	3	5
0061	0	0	0	0	0	0	0	13	1	2	0	0	7	12	0	0	5	9	0	0	0	0	0	0	0	3	5	15	26
0062	0	0	0	0	0	1	2	13	0	0	0	0	7	12	0	0	5	9	0	0	0	0	0	0	0	0	0	13	22
0063	0	0	0	0	0	0	0	15	2	4	0	0	3	5	0	0	10	18	0	0	0	0	0	0	0	2	4	15	27
0064	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	6	13	7	15
0065	0	0	0	0	0	0	0	15	1	1	0	0	8	11	0	0	6	9	0	0	0	0	0	0	0	2	3	16	23
0066	0	0	0	0	0	2	2	16	1	1	0	0	3	4	0	0	11	13	0	0	0	0	0	0	0	1	1	18	22
0067	0	0	0	0	0	0	0	4	0	0	0	0	2	2	0	0	2	2	0	0	0	0	0	0	0	0	0	4	4
0068	0	0	0	0	0	6	9	2	0	0	0	0	1	1	0	0	1	1	0	0	0	0	0	0	0	5	7	13	19
0069	0	0	0	0	0	0	0	6	1	1	0	0	0	0	0	0	5	5	0	0	0	0	0	0	0	1	1	6	6
0070	0	0	0	1	2	0	0	11	1	2	0	0	1	2	0	0	8	15	0	0	0	0	0	0	0	4	8	14	27
0071	0	0	0	0	0	0	0	7	1	1	0	0	3	4	0	0	4	5	0	0	0	0	0	0	0	5	6	12	15
0072	0	0	0	0	0	0	0	10(30)	1	1	3	3	2	2	6	6	7	7	21	20	0	0	0	0	0	1	1	10	10
0073	0	0	0	0	0	0	0	15(50)	2	3	7	8	4	5	13	17	8	10	27	34	0	0	0	0	0	3	4	15	19
0074	0	0	0	0	0	1	1	8	0	0	0	0	3	3	0	0	4	4	0	0	1	1	1	0	0	3	3	11	11
0075	0	0	0	0	0	0	0	7	1	1	0	0	0	0	0	0	6	6	0	0	0	0	0	0	0	1	1	7	7

Sample	UTM		Table	Garnets												Chromite														
	East	North	Feed (Kg)	Picked	G9		G10		Megacrysts		Picked	Eclogitic		Crustal		Picked	DIF		Est. DIF		L/K		Est.L/K		OF		Est. OF		N-KIM	
KAP-				GP***	R	N*	R	N*	R	N*	GO***	R	N*	R	N*	CR***	R	N*	R**	N*	R	N*	R**	N*	R	N*	R**	N*	R	N*
0076	326526	5231495	9.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0077	327082	5231119	12.9	0	0	0	0	0	0	0	0	0	0	0	0	5(15)	0	0	0	0	0	0	0	0	4	5	12	14	0	0
0078	327902	5227222	13.1	2	2	2	0	0	0	0	0	0	0	7	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0079	328574	5225039	15.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0080	319774	5225161	11.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0081	321249	5222405	15.1	0	0	0	0	0	0	0	0	0	0	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0082	317538	5222681	13.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0083	315303	5221551	11.9	0	0	0	0	0	0	0	0	0	0	0	0	6(10)	0	0	0	0	0	0	0	0	2	3	3	4	2	3
0084	316087	5215580	13.5	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0085	315880	5211133	15.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0086	316368	5208071	13.8	1	1	1	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	1	1	0	0	0	0
0087	281151	5217598	14.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0088	281647	5216103	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0089	277082	5213024	14.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0090	276824	5210857	11.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0091	325699	5216907	10.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0092	325393	5212868	11.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0093	322287	5217897	4.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0094	319315	5229563	16.4	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0095	319376	5229705	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0096	321379	5226799	14.35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0097	313556	5217818	13.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0098	315206	5215318	12.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0099	301684	5236675	13.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0100	297826	5242522	9.5	0	0	0	0	0	0	0	0	0	0	0	0	5(10)	0	0	0	0	1	2	2	3	2	3	4	6	1	2
0101	270145	5306086	12.5	3	2	2	0	0	1	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1	0	0	0	0
0102	270208	5305802	15.1	1	1	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1	0	0	0	0
0103	269935	5305586	12.2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1	0	0	0	0
0104	256750	5279099	18.3	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	1	1	0	0	1	1
0105	255964	5279217	12.3	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0
0106	256784	5276187	16.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0107	225556	5308816	15.2	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	3	3	0	0	0	0
0118	245979	5307107	10	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	2	0	0	0	0
0119	241889	5302222	12.9	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1
0120	239929	5304582	16.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0121	246679	5301665	9.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Sample	Mg-ilmenite							Cr-diopside													Olivine					Total KIM grains		Total grains	
	Picked	KIM		PseudoKIM		N-KIM		Picked	KIM		Est. KIM		N-KIM (I-C)		Est. (I-C)		N-KIM (II-M)		Est. (II-M)		Picked	FO>80		FO<80					
KAP	IM***	R	N*	R	N*	R	N*	DC***	R	N*	R**	N*	R	N*	R**	N*	R	N*	R**	N*	FO***	R	N*	R	N*	R	N*	R	N*
0076	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	5	8	0	0	0	0	0	0	0	0	0	5	8
0077	0	0	0	0	0	0	0	21(35)	2	2	3	4	4	5	7	8	15	17	25	29	0	0	0	0	0	6	7	25	29
0078	0	0	0	0	0	0	0	4	2	2	0	0	1	1	0	0	1	1	0	0	0	0	0	0	0	4	5	13	15
0079	0	0	0	0	0	0	0	6	0	0	0	0	1	1	0	0	4	4	0	0	0	0	0	0	0	0	0	5	5
0080	0	0	0	0	0	0	0	4	0	0	0	0	1	1	0	0	3	4	0	0	0	0	0	0	0	0	0	4	5
0081	0	0	0	0	0	2	2	9	3	3	0	0	2	2	0	0	4	4	0	0	0	0	0	0	0	3	3	13	13
0082	0	0	0	0	0	0	0	16	2	2	0	0	4	4	0	0	10	11	0	0	0	0	0	0	0	2	2	16	17
0083	0	0	0	0	0	1	1	23(40)	6	8	10	13	3	4	5	7	12	15	21	26	0	0	0	0	0	8	10	26	33
0084	0	0	0	0	0	0	0	10	2	2	0	0	1	1	0	0	7	8	0	0	0	0	0	0	0	3	3	11	12
0085	0	0	0	0	0	0	0	14	2	2	0	0	5	5	0	0	7	7	0	0	0	0	0	0	0	2	2	14	14
0086	0	0	0	0	0	0	0	21(50)	5	5	12	13	4	4	10	10	11	12	26	28	0	0	0	0	0	7	8	22	24
0087	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0088	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0089	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	2	2
0090	0	0	0	0	0	0	0	5	0	0	0	0	3	4	0	0	2	3	0	0	0	0	0	0	0	0	0	5	7
0091	0	0	0	0	0	0	0	5	0	0	0	0	2	3	0	0	3	4	0	0	0	0	0	0	0	0	0	5	7
0092	0	0	0	0	0	0	0	8	1	1	0	0	4	5	0	0	4	5	0	0	0	0	0	0	0	1	1	9	11
0093	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	3	0	0	0	0	0	0	0	0	0	1	3
0094	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
0095	0	0	0	0	0	0	0	14	1	1	0	0	5	4	0	0	7	6	0	0	0	0	0	0	0	1	1	13	11
0096	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0097	0	0	0	0	0	0	0	20(75)	1	1	4	4	7	8	26	30	9	10	34	38	0	0	0	0	0	1	1	17	19
0098	0	0	0	0	0	0	0	2	0	0	0	0	1	1	0	0	1	1	0	0	0	0	0	0	0	0	0	2	2
0099	0	0	0	0	0	0	0	2	0	0	0	0	1	1	0	0	1	1	0	0	0	0	0	0	0	0	0	2	2
0100	0	0	0	0	0	2	3	9	1	2	0	0	6	9	0	0	3	5	0	0	0	0	0	0	0	4	6	16	25
0101	1	0	0	1	1	1	1	14	0	0	0	0	5	6	0	0	8	10	0	0	0	0	0	0	0	4	5	19	23
0102	0	0	0	0	0	0	0	3	0	0	0	0	2	2	0	0	1	1	0	0	0	0	0	0	0	2	2	5	5
0103	0	0	0	0	0	0	0	18	3	4	0	0	8	10	0	0	7	9	0	0	0	0	0	0	0	4	5	19	23
0104	0	0	0	0	0	0	0	15(30)	3	2	6	5	3	2	6	5	9	7	18	15	0	0	0	0	0	4	3	17	14
0105	0	0	0	0	0	0	0	4	1	1	0	0	1	1	0	0	2	2	0	0	0	0	0	0	0	2	2	5	6
0106	0	0	0	0	0	0	0	2	0	0	0	0	1	1	0	0	1	1	0	0	0	0	0	0	0	0	0	2	2
0107	0	0	0	0	0	0	0	12	3	3	0	0	8	8	0	0	3	3	0	0	0	0	0	0	0	6	6	17	17
0118	1	0	0	1	2	0	0	4	1	2	0	0	0	0	0	0	3	5	0	0	0	0	0	0	0	2	3	6	9
0119	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
0120	0	0	0	0	0	0	0	6	0	0	0	0	2	2	0	0	3	3	0	0	0	0	0	0	0	0	0	5	4
0121	0	0	0	0	0	0	0	4	2	3	0	0	1	2	0	0	1	2	0	0	0	0	0	0	0	2	3	4	6

Sample	UTM		Table	Garnets												Chromite																
	East	North	Feed	Picked	G9		G10		Megacrysts		Picked	Eclogitic		Crustal		Picked	DIF		Est. DIF		L/K		Est.L/K		OF		Est. OF		N-KIM	
KAP-			(Kg)	GP***	R	N*	R	N*	R	N*	GO***	R	N*	R	N*	CR***	R	N*	R**	N*	R	N*	R**	N*	R	N*	R**	N*	R	N*
0122	241082	5297830	13.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0123	256623	5213747	9.1	0	0	0	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0124	260803	5210597	13.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0125	260839	5210518	7.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0126	256851	5215261	11.7	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	2	3	0	0	0	0
0127	252135	5213916	6.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0128	252344	5213229	8.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0129	251358	5212452	6.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0130	248264	5211419	7.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0131	246566	5210584	8.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0132	241342	5211172	12.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0133	242597	5213169	9.3	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	2	0	0	0	0
0134	246382	5214440	11.3	0	0	0	0	0	0	0	0	0	0	0	0	7(15)	3	4	6	9	1	1	2	3	3	4	6	9	0	0
0135	251177	5217671	10.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0136	252844	5230097	10.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0137	253301	5230315	15.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0138	251811	5231976	8.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0139	247652	5228738	6.4	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0140	239905	5225291	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0141	238758	5224798	8.1	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0142	237764	5222058	5.6	1	1	3	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	2	5	0	0	1	3
0143	238176	5219409	12.1	1	1	1	0	0	0	0	0	0	0	0	0	7(15)	0	0	0	0	0	0	0	0	6	7	13	16	0	0
0144	237705	5218447	16.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0145	237620	5217019	15.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0146	235960	5215514	8.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0147	233405	5212692	6.3	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	2	5	0	0	1	2
0148	233748	5212120	9.5	0	0	0	0	0	0	0	0	0	0	0	0	11(25)	0	0	0	0	0	0	0	0	9	14	20	32	2	3
0149	226350	5212015	9.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0150	254291	5218697	13.8	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1
0151	251641	5222312	15.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0152	253154	5218760	13	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2	2	0	0	0	0
0153	251645	5217010	10.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0154	219419	5212246	18.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0155	219643	5215621	13.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0156	379104	5206988	5.1	0	0	0	0	0	0	0	0	0	0	0	0	32(50)	0	0	0	0	0	0	0	0	26	76	41	119	3	9
0157	374564	5214079	15.3	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	1	1	0	0	1	1	0	0	0	0

Sample	Mg-ilmenite							Cr-diopside														Olivine					Total		Total	
	Picked	KIM		PseudoKIM		N-KIM		Picked	KIM		Est. KIM		N-KIM (I-C)		Est. (I-C)		N-KIM (II-M)		Est. (II-M)		Picked	FO>80		FO<80		KIM grains		grains	
KAP	IM***	R	N*	R	N*	R	N*	DC***	R	N*	R**	N*	R	N*	R**	N*	R	N*	R**	N*	FO***	R	N*	R	N*	R	N*	R	N*
0122	0	0	0	0	0	0	0	16	4	5	0	0	1	1	0	0	10	11	0	0	0	0	0	0	0	4	5	15	17
0123	0	0	0	0	0	1	2	1	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	3	5
0124	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0126	1	0	0	1	1	3	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	3	6	8
0127	0	0	0	0	0	0	0	7	1	2	0	0	1	2	0	0	5	11	0	0	0	0	0	0	0	1	2	7	15
0128	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0129	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	3	7	0	0	0	0	0	0	0	0	0	3	7
0130	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	1	2
0131	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0132	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	3	4	0	0	0	0	0	0	0	0	0	3	4
0133	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	6	10	0	0	0	0	0	0	0	1	2	7	11
0134	7	8	11	9	12	1	1	6	2	3	0	0	0	0	0	0	4	5	0	0	0	0	0	0	0	17	23	31	41
0135	0	0	0	0	0	0	0	2	1	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	1	1	2	3
0136	0	0	0	0	0	0	0	3	0	0	0	0	1	1	0	0	1	1	0	0	0	0	0	0	0	0	0	2	3
0137	0	0	0	0	0	0	0	26	4	4	0	0	8	8	0	0	13	12	0	0	0	0	0	0	0	4	4	25	24
0138	0	0	0	0	0	0	0	4	0	0	0	0	2	3	0	0	2	3	0	0	0	0	0	0	0	0	0	4	7
0139	0	0	0	0	0	8	19	4	1	2	0	0	0	0	0	0	2	5	0	0	0	0	0	0	0	1	2	11	26
0140	1	0	0	2	4	14	26	13	0	0	0	0	1	2	0	0	7	13	0	0	0	0	0	0	0	0	0	24	45
0141	0	0	0	0	0	5	9	3	0	0	0	0	1	2	0	0	1	2	0	0	0	0	0	0	0	1	2	8	15
0142	0	0	0	0	0	0	0	4	0	0	0	0	3	8	0	0	1	3	0	0	0	0	0	0	0	3	8	8	21
0143	0	0	0	1	1	7	9	19	1	1	0	0	8	10	0	0	10	12	0	0	0	0	0	0	0	8	10	34	42
0144	0	0	0	0	0	0	0	7	0	0	0	0	2	2	0	0	2	2	0	0	0	0	0	0	0	0	0	4	4
0145	0	0	0	0	0	0	0	6	1	1	0	0	1	1	0	0	3	3	0	0	0	0	0	0	0	1	1	5	5
0146	0	0	0	0	0	0	0	8	0	0	0	0	4	7	0	0	4	7	0	0	0	0	0	0	0	0	0	8	14
0147	0	0	0	0	0	4	10	1	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	2	5	8	19
0148	0	0	0	0	0	3	5	16(25)	2	3	3	5	4	6	6	10	10	16	16	25	0	0	0	0	0	11	17	30	47
0149	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0150	0	0	0	0	0	1	1	7	1	1	0	0	2	2	0	0	4	4	0	0	0	0	0	0	0	1	1	9	10
0151	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	3	3
0152	0	0	0	0	0	0	0	12	2	2	0	0	2	2	0	0	6	7	0	0	0	0	0	0	0	4	5	12	14
0153	0	0	0	0	0	0	0	3	0	0	0	0	1	1	0	0	2	3	0	0	0	0	0	0	0	0	0	3	4
0154	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	1	1
0155	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	2	2
0156	0	0	0	0	0	10	29	0	0	0	0	0	0	0	0	0	3	9	0	0	1	1	3	3	9	27	79	46	135
0157	0	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	6	6

Sample	UTM		Table	Garnets												Chromite																	
	East	North	Feed (Kg)	Picked	G9		G10		Megacrysts		Picked	Eclogitic		Crustal		Picked	DIF		Est. DIF		L/K		Est.L/K		OF		Est. OF		N-KIM	
KAP-				GP***	R	N*	R	N*	R	N*	GO***	R	N*	R	N*	CR***	R	N*	R**	N*	R	N*	R**	N*	R	N*	R**	N*	R	N*
0158	364324	5206668	14.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0159	362704	5210033	17.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0160	362004	5210368	13.6	0	0	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	8	9	0	0	0	0
0161	379854	5213659	8.9	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0162	362204	5212869	10.1	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	6	9	0	0	0	0
0163	369804	5215219	12.8	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	4	5	0	0	1	1
0164	360004	5213419	15.5	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0
0165	318806	5208818	13	0	0	0	0	0	0	0	0	0	0	0	0	11(20)	0	0	0	0	1	1	2	2	8	9	15	17	2	2
0166	322945	5211778	11.9	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	2	3	0	0	2	3
0167	322330	5211588	14	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	1	1	0	0	0	0	0	0	0	0
0168	323355	5214238	7.8	0	0	0	0	0	0	0	0	0	0	0	0	12(20)	0	0	0	0	1	2	2	3	7	13	12	22	3	6
0169	275047	5240319	7.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0170	268762	5232459	13.8	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1	0	0	0	0
0171	273907	5232038	12.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0172	271904	5234314	15.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0173	284867	5216828	8.7	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	6	10	0	0	0	0
0174	283457	5217303	10.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0175	273501	5224848	16.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0176	286857	5233789	11.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0177	308292	5223275	10.1	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	1	1	0	0	1	1
0178	302926	5218018	10.3	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1	0	0	0	0
0179	335645	5230009	13.7	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0
0180	336968	5225335	7.7	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	3	6	0	0	3	6
0181	344042	5214384	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0182	359032	5216367	13.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0183	346874	5226015	14.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0184	345855	5226169	13	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1	0	0	0	0
0185	341628	5223040	16.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0186	341305	5223069	12	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0187	333844	5250294	12.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0188	331511	5253010	13.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0189	355014	5264274	14.4	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0190	355453	5264832	12.3	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	1	1	0	0	1	1
0191	357532	5267533	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0192	389228	5240694	11.2	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	1	1	0	0	2	3	0	0	0	0
0193	389061	5242775	11.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Sample	Mg-ilmenite							Cr-diopside													Olivine					Total		Total	
	Picked	KIM		PseudoKIM		N-KIM		Picked	KIM		Est. KIM		N-KIM (I-C)		Est. (I-C)		N-KIM (II-M)		Est. (II-M)		Picked	FO>80		FO<80		KIM grains		grains	
KAP	IM***	R	N*	R	N*	R	N*	DC***	R	N*	R**	N*	R	N*	R**	N*	R	N*	R**	N*	FO***	R	N*	R	N*	R	N*	R	N*
0158	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0159	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0160	0	0	0	0	0	8	9	3	1	1	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	9	10	19	21
0161	0	0	0	0	0	1	2	3	0	0	0	0	1	2	0	0	2	3	0	0	0	0	0	0	0	1	2	5	8
0162	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	3	0	0	8	12	8	12
0163	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	4	5	7	8
0164	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	1	1	2	2
0165	0	0	0	1	1	2	2	13	1	1	0	0	7	8	0	0	4	5	0	0	1	1	1	0	0	11	13	27	31
0166	0	0	0	0	0	0	0	21	4	5	0	0	5	6	0	0	12	15	0	0	0	0	0	0	0	6	8	25	32
0167	1	2	2	1	1	1	1	17	1	1	0	0	5	5	0	0	10	11	0	0	0	0	0	0	0	4	4	21	23
0168	0	0	0	0	0	0	0	1	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	8	15	12	23
0169	0	0	0	0	0	6	12	15	0	0	0	0	0	0	0	0	16	32	0	0	0	0	0	0	0	0	0	22	44
0170	0	0	0	0	0	0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	1	1	3	3
0171	0	0	0	0	0	0	0	6	0	0	0	0	4	5	0	0	2	2	0	0	0	0	0	0	0	0	0	6	7
0172	0	0	0	0	0	0	0	2	1	1	0	0	1	1	0	0	1	1	0	0	0	0	0	0	0	1	1	3	3
0173	0	0	0	1	2	2	3	3	1	2	0	0	2	3	0	0	0	0	0	0	0	0	0	0	0	7	12	12	21
0174	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	2	3	0	0	0	0	0	0	0	0	0	2	3
0175	0	0	0	1	1	0	0	1	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	2	2
0176	0	0	0	0	0	0	0	4	0	0	0	0	3	4	0	0	1	1	0	0	0	0	0	0	0	0	0	4	5
0177	0	0	0	0	0	0	0	12	2	3	0	0	4	6	0	0	6	9	0	0	0	0	0	0	0	3	4	14	21
0178	1	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2	3	0	0	0	0	0	0	0	1	1	3	4
0179	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	1	1	2	2
0180	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	6	6	12
0181	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0182	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	1	1
0183	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0184	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	1	1	3	3
0185	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1
0186	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1
0187	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0188	0	0	0	0	0	0	0	4	0	0	0	0	1	1	0	0	3	3	0	0	0	0	0	0	0	0	0	4	4
0189	0	0	0	0	0	0	0	11	1	1	0	0	5	5	0	0	4	4	0	0	10	9	9	0	0	10	10	20	21
0190	0	0	0	0	0	0	0	5	1	1	0	0	1	1	0	0	3	4	0	0	0	0	0	0	0	2	2	7	9
0191	0	0	0	0	0	0	0	4	2	3	0	0	5	8	0	0	2	3	0	0	0	0	0	0	0	2	3	9	15
0192	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	3	4	4	5
0193	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Sample	UTM		Table	Garnets												Chromite														
	East	North	Feed	Picked	G9		G10		Megacrysts		Picked	Eclogitic		Crustal		Picked	DIF		Est. DIF		L/K		Est.L/K		OF		Est. OF		N-KIM	
KAP-			(Kg)	GP***	R	N*	R	N*	R	N*	GO***	R	N*	R	N*	CR***	R	N*	R**	N*	R	N*	R**	N*	R	N*	R**	N*	R	N*
0194	392744	5251487	13.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0195	391003	5244159	13.4	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0196	318697	5311738	11.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0197	316328	5308968	8.4	0	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0198	341519	5259194	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0199	342553	5259459	9.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0200	343865	5255274	12.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0201	282545	5241734	13.7	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2	2	0	0	0	0
0202	281477	5240256	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0203	295137	5229537	14.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0204	296961	5230160	11.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0205	298944	5226247	13.4	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0206	297176	5224032	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0207	294879	5221802	9.7	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	2	3	0	0	1	2
0208	293265	5220387	9.1	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2	3	0	0	0	0
0209	291249	5219801	12	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	4	5	0	0	1	1
0210	291045	5219800	12.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0211	297996	5212218	12.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0212	304388	5213824	10.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0213	305806	5211068	8.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0214	312480	5220120	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0215	288400	5217415	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0216	286405	5225769	10.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0217	293125	5213318	9.5	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	6	9	0	0	0	0
0218	297509	5209587	10.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0219	312178	5219922	16.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0220	305804	5215307	10.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0221	286172	5220517	10.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0222	341533	5218454	16.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0223	339864	5215249	16.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0224	337506	5211860	12.8	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0225	335351	5209043	15.2	2	2	2	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0226	366304	5276319	14.3	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0227	368129	5275390	11	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0228	369180	5271046	11.7	0	0	0	0	0	0	0	0	0	0	2	3	4	0	0	0	0	1	1	0	0	2	3	0	0	0	0
0229	369096	5268574	12.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Sample	Mg-ilmenite							Cr-diopside													Olivine					Total KIM grains		Total grains	
	Picked	KIM		PseudoKIM		N-KIM		Picked	KIM		Est. KIM		N-KIM (I-C)		Est. (I-C)		N-KIM (II-M)		Est. (II-M)		Picked	FO>80		FO<80					
KAP	IM***	R	N*	R	N*	R	N*	DC***	R	N*	R**	N*	R	N*	R**	N*	R	N*	R**	N*	FO***	R	N*	R	N*	R	N*	R	N*
0194	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1
0195	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	1	1
0196	0	0	0	0	0	0	0	8	1	1	0	0	2	3	0	0	5	7	0	0	0	0	0	0	0	1	1	8	11
0197	0	0	0	0	0	0	0	4	0	0	0	0	1	2	0	0	3	5	0	0	0	0	0	0	0	1	2	5	9
0198	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0199	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0201	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	2	2	3	3
0202	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0203	0	0	0	0	0	0	0	9	1	1	0	0	6	6	0	0	2	2	0	0	0	0	0	0	0	1	1	9	10
0204	0	0	0	0	0	0	0	6	1	1	0	0	3	4	0	0	2	3	0	0	0	0	0	0	0	1	1	6	8
0205	0	0	0	0	0	0	0	9	1	1	0	0	4	4	0	0	4	4	0	0	0	0	0	0	0	2	2	10	11
0206	0	0	0	0	0	0	0	7	2	2	0	0	8	8	0	0	0	0	0	0	0	0	0	0	0	2	2	10	10
0207	0	0	0	0	0	0	0	5	0	0	0	0	2	3	0	0	3	5	0	0	0	0	0	0	0	2	3	8	12
0208	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	3	2	3
0209	0	0	0	0	0	0	0	5	2	3	0	0	0	0	0	0	3	4	0	0	0	0	0	0	0	6	8	10	13
0210	0	0	0	0	0	1	1	2	1	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	1	1	3	4
0211	0	0	0	0	0	0	0	5	0	0	0	0	4	5	0	0	1	1	0	0	0	0	0	0	0	0	0	5	6
0212	0	0	0	0	0	0	0	8	2	3	0	0	4	6	0	0	2	3	0	0	0	0	0	0	0	2	3	8	11
0213	0	0	0	0	0	0	0	2	0	0	0	0	1	2	0	0	1	2	0	0	0	0	0	0	0	0	0	2	3
0214	0	0	0	0	0	0	0	4	1	1	0	0	0	0	0	0	3	4	0	0	0	0	0	0	0	1	1	4	5
0215	0	0	0	0	0	0	0	2	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2
0216	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	R	N*	0	0	0	0	1	1
0217	0	0	0	0	0	0	0	3	0	0	0	0	1	2	0	0	2	3	0	0	0	0	0	0	0	6	9	9	14
0218	0	0	0	0	0	0	0	5	1	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	1	1	2	3
0219	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0220	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
0221	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0222	0	0	0	0	0	0	0	5	4	4	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	4	4	5	5
0223	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0224	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	1	1	2	2
0225	2	0	0	2	2	0	0	4	1	1	0	0	0	0	0	0	3	3	0	0	8(20)	6	6	3	3	10	10	18	18
0226	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1
0227	0	0	0	0	0	1	1	13	0	0	0	0	5	7	0	0	7	10	0	0	0	0	0	0	0	0	0	13	18
0228	0	0	0	0	0	5	6	6	0	0	0	0	1	1	0	0	5	6	0	0	30(4540)	29	37	0	0	32	41	45	58
0229	0	0	0	0	0	1	1	2	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	3	4

Sample	UTM		Table	Garnets												Chromite																
	East	North	Feed	Picked	G9		G10		Megacrysts		Picked	Eclogitic		Crustal		Picked	DIF		Est. DIF		L/K		Est.L/K		OF		Est. OF		N-KIM	
KAP-			(Kg)	GP***	R	N*	R	N*	R	N*	GO***	R	N*	R	N*	CR***	R	N*	R**	N*	R	N*	R**	N*	R	N*	R**	N*	R	N*
0230	328094	5237670	10.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0231	333868	5237726	10.7	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1	0	0	0	0
0232	323051	5245269	10.3	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	3	4	0	0	0	0
0233	326805	5244596	15.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0234	327586	5243795	12	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	1	1	0	0	2	3
0235	346240	5239191	14.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0236	345385	5235708	12.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0237	347490	5230363	10.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0238	346150	5232928	13.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0239	345615	5240699	11.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0240	349233	5246297	8.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0241	334488	5254880	12.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0242	321244	5258985	13.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0243	324654	5253935	13.6	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0244	333327	5264407	13.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0245	363069	5287231	14.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0246	365391	5285480	11.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0247	366100	5283213	11.4	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1
0248	359135	5286436	12.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0249	358431	5275219	7.4	0	0	0	0	0	0	0	0	0	0	0	0	15(25)	0	0	0	0	0	0	0	0	13	26	22	44	0	0
0250	350869	5278761	10.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0252	354939	5312981	11.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0253	341926	5299642	11.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0254	322006	5294940	9.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0255	372614	5284142	10	1	1	2	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	1	2	0	0	0	0
0256	363148	5281770	9.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0257	354722	5287353	12.6	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0258	353205	5281813	10.2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0259	320637	5291689	13	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0260	357110	5260273	14.8	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	1	1
0261	355604	5257819	12.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0262	342746	5262806	13.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0263	327821	5268713	11.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0264	307487	5257300	15.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0265	306194	5255999	17	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0266	302216	5263774	13.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Sample	Mg-ilmenite							Cr-diopside													Olivine					Total KIM grains		Total grains	
	Picked	KIM		PseudoKIM		N-KIM		Picked	KIM		Est. KIM		N-KIM (I-C)		Est. (I-C)		N-KIM (II-M)		Est. (II-M)		Picked	FO>80		FO<80					
KAP	IM***	R	N*	R	N*	R	N*	DC***	R	N*	R**	N*	R	N*	R**	N*	R	N*	R**	N*	FO***	R	N*	R	N*	R	N*	R	N*
0230	0	0	0	0	0	0	0	4	0	0	0	0	3	4	0	0	1	1	0	0	0	0	0	0	0	0	0	4	6
0231	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	3
0232	0	0	0	0	0	2	3	9	1	1	0	0	5	7	0	0	4	6	0	0	0	0	0	0	0	4	6	15	22
0233	0	0	0	0	0	0	0	8	0	0	0	0	2	2	0	0	6	6	0	0	0	0	0	0	0	0	0	8	8
0234	0	0	0	0	0	1	1	5	0	0	0	0	1	1	0	0	4	5	0	0	0	0	0	0	0	1	1	9	11
0235	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0236	0	0	0	0	0	0	0	2	0	0	0	0	1	1	0	0	1	1	0	0	1	1	1	0	0	1	1	3	4
0237	0	0	0	0	0	0	0	4	1	1	0	0	0	0	0	0	3	4	0	0	0	0	0	0	0	1	1	4	6
0238	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	2	2
0239	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0240	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0241	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	1	1	1	1
0242	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	1	1	1	1
0243	0	0	0	0	0	0	0	13	0	0	0	0	5	6	0	0	7	8	0	0	5	4	4	1	1	4	4	18	20
0244	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0246	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0247	0	0	0	0	0	1	1	9	0	0	0	0	1	1	0	0	8	11	0	0	0	0	0	0	0	0	0	11	14
0248	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0249	0	0	0	0	0	4	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	26	17	34
0250	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0252	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0253	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0254	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0255	0	0	0	0	0	3	5	1	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	2	3	6	9
0256	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0257	0	0	0	0	0	0	0	4	1	1	0	0	3	4	0	0	0	0	0	0	1	1	1	0	0	2	2	5	6
0258	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1
0259	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	2
0260	0	0	0	0	0	0	0	5	1	1	0	0	2	2	0	0	2	2	0	0	0	0	0	0	0	1	1	6	6
0261	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0262	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	1	0	0	1	1	1	1
0263	0	0	0	0	0	0	0	2	0	0	0	0	1	1	0	0	1	1	0	0	0	0	0	0	0	0	0	2	3
0264	0	0	0	0	0	0	0	15	1	1	0	0	7	7	0	0	6	6	0	0	0	0	0	0	0	1	1	14	13
0265	0	0	0	0	0	0	0	12	1	1	0	0	3	3	0	0	8	7	0	0	0	0	0	0	0	2	2	13	11
0266	0	0	0	0	0	0	0	5	0	0	0	0	1	1	0	0	4	4	0	0	0	0	0	0	0	0	0	5	5

Sample	UTM		Table	Garnets												Chromite																
	East	North	Feed (Kg)	Picked	G9		G10		Megacrysts		Picked	Eclogitic		Crustal		Picked	DIF		Est. DIF		L/K		Est.L/K		OF		Est. OF		N-KIM	
KAP-				GP***	R	N*	R	N*	R	N*	GO***	R	N*	R	N*	CR***	R	N*	R**	N*	R	N*	R**	N*	R	N*	R**	N*	R	N*
0267	302482	5269356	11.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0268	285965	5298357	10.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0269	301006	5302319	9.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0270	256275	5295686	11.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0271	253793	5302084	8.7	0	0	0	0	0	0	0	1	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0272	266454	5297799	14.6	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0273	273830	5283868	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0274	260111	5274092	10.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0275	261935	5267247	14.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0276	269795	5274627	17.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0278	278812	5312910	11.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0301	344985	5252731	11.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0302	381052	5267685	11.9	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0303	384717	5280694	9.5	0	0	0	0	0	0	0	0	0	0	0	0	25	0	0	0	0	1	2	0	0	17	27	0	0	3	5
0304	379372	5275390	8.8	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	4	7	0	0	1	2
0305	419258	5257641	17.1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1	0	0	0	0
0306	408809	5261692	13.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0307	400915	5256280	12.8	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	2	2	0	0	1	1
0308	397729	5257994	13.8	0	0	0	0	0	0	0	0	0	0	0	0	17(40)	0	0	0	0	0	0	0	0	12	13	28	31	0	0
0309	415337	5243263	10.7	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	2	3	0	0	1	1
0310	413756	5240980	16.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0311	329574	5315695	8.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0313	341405	5305791	10.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0314	348960	5295181	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0315	374246	5281616	12.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0316	365924	5279907	9.3	0	0	0	0	0	0	0	0	0	0	0	0	5(20)	0	0	0	0	0	0	0	0	3	5	12	19	0	0
0317	361196	5279610	12.6	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1
0318	359523	5296721	14.8	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1	0	0	0	0
0319	344925	5279428	10.2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1	0	0	0	0
0320	316658	5304129	11.5	1	0	0	0	0	0	0	0	0	0	0	0	7(15)	0	0	0	0	0	0	0	0	6	8	13	17	1	1
0321	320785	5304882	10.4	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	1	1	0	0	0	0
0322	356747	5254722	7.7	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0323	352420	5257458	11.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0324	340140	5267109	11.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0325	324820	5256668	13.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0326	306772	5251318	12.7	1	1	1	0	0	0	0	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Sample	Mg-ilmenite							Cr-diopside													Olivine					Total		Total	
	Picked	KIM		PseudoKIM		N-KIM		Picked	KIM		Est. KIM		N-KIM (I-C)		Est. (I-C)		N-KIM (II-M)		Est. (II-M)		Picked	FO>80		FO<80		KIM grains		grains	
KAP	IM***	R	N*	R	N*	R	N*	DC***	R	N*	R**	N*	R	N*	R**	N*	R	N*	R**	N*	FO***	R	N*	R	N*	R	N*	R	N*
0267	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0268	0	0	0	0	0	0	0	6	1	1	0	0	2	3	0	0	3	4	0	0	0	0	0	0	0	1	1	6	9
0269	1	0	0	1	2	0	0	20(70)	0	0	0	0	0	0	0	0	20	31	70	109	0	0	0	0	0	0	0	21	33
0270	0	0	0	0	0	0	0	8	5	6	0	0	0	0	0	0	4	5	0	0	0	0	0	0	0	5	6	9	12
0271	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	2	3
0272	0	0	0	0	0	0	0	10	5	5	0	0	1	1	0	0	3	3	0	0	0	0	0	0	0	5	5	10	10
0273	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0274	1	0	0	1	1	0	0	7	2	3	0	0	0	0	0	0	5	7	0	0	0	0	0	0	0	2	3	8	11
0275	0	0	0	0	0	0	0	7	2	2	0	0	0	0	0	0	5	5	0	0	0	0	0	0	0	2	2	7	7
0276	0	0	0	0	0	0	0	14	8	7	0	0	0	0	0	0	6	5	0	0	0	0	0	0	0	8	7	14	12
0278	0	0	0	0	0	0	0	10	6	8	0	0	0	0	0	0	4	5	0	0	0	0	0	0	0	6	8	10	13
0301	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0302	0	0	0	0	0	4	5	6	2	3	0	0	3	4	0	0	2	3	0	0	0	0	0	0	0	3	4	12	15
0303	0	0	0	0	0	1	2	1	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	18	28	23	36
0304	0	0	0	0	0	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	7	7	12
0305	0	0	0	0	0	0	0	2	1	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	2	2	3	3
0306	0	0	0	0	0	0	0	2	0	0	0	0	1	1	0	0	1	1	0	0	0	0	0	0	0	0	0	2	2
0307	0	0	0	0	0	2	2	3	1	1	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	3	4	8	9
0308	0	0	0	0	0	1	1	3	0	0	0	0	2	2	0	0	1	1	0	0	0	0	0	0	0	12	13	16	17
0309	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2	3	4	6
0310	0	0	0	0	0	0	0	3	0	0	0	0	1	1	0	0	2	2	0	0	0	0	0	0	0	0	0	3	3
0311	0	0	0	0	0	0	0	3	0	0	0	0	1	2	0	0	2	4	0	0	8	5	9	0	0	5	9	8	14
0313	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0314	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	3	3
0315	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0316	0	0	0	0	0	1	2	12	2	3	0	0	8	13	0	0	2	3	0	0	5	3	5	0	0	8	13	19	31
0317	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
0318	0	0	0	0	0	0	0	3	2	2	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	3	3	4	4
0319	0	0	0	0	0	0	0	23	4	6	0	0	13	19	0	0	8	12	0	0	0	0	0	0	0	5	7	26	38
0320	0	0	0	0	0	0	0	5	2	3	0	0	0	0	0	0	3	4	0	0	0	0	0	0	0	8	10	12	16
0321	0	0	0	0	0	0	0	2	1	1	0	0	0	0	0	0	3	4	0	0	0	0	0	0	0	2	3	6	9
0322	0	0	0	0	0	0	0	1	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2
0323	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0324	0	0	0	0	0	0	0	2	1	1	0	0	2	3	0	0	1	1	0	0	2	0	0	2	3	1	1	6	8
0325	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0326	0	0	0	0	0	0	0	13	0	0	0	0	5	6	0	0	9	11	0	0	0	0	0	0	0	2	2	17	20

Sample	UTM		Table	Garnets												Chromite														
	East	North	Feed (Kg)	Picked	G9		G10		Megacrysts		Picked	Eclogitic		Crustal		Picked	DIF		Est. DIF		L/K		Est.L/K		OF		Est. OF		N-KIM	
KAP-				GP***	R	N*	R	N*	R	N*	GO***	R	N*	R	N*	CR***	R	N*	R**	N*	R	N*	R**	N*	R	N*	R**	N*	R	N*
0327	303343	5256839	8.2	1	1	2	0	0	0	0	0	0	0	0	0	7(25)	0	0	0	0	0	0	0	0	5	9	18	33	1	2
0328	312253	5271495	16.3	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1
0329	297203	5271097	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0330	298270	5295568	13.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0331	303846	5296417	14.55	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1	0	0	0	0
0332	253643	5294878	10.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0333	256694	5299236	9.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0334	259500	5301217	15.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0335	269779	5296183	8.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0336	263071	5276857	7.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0337	263739	5272776	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0338	265851	5270685	8.5	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2	4	0	0	0	0
0340	279005	5316015	13.1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1
0434	326238	5285642	13.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0435	326751	5284785	12.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0436	302421	5281520	11.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0437	300881	5288136	8.7	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0438	295748	5290618	8.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0439	291777	5287145	12.9	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0440	294792	5288131	12.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0441	289014	5284933	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0442	288384	5285407	15.9	0	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0443	298644	5278607	12.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0444	298665	5277094	12.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0445	295691	5274024	13.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0446	300109	5281249	16.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0447	307817	5270332	17.5	0	0	0	0	0	0	0	0	0	0	1	1	4	0	0	0	0	0	0	0	0	4	3	0	0	0	0
0448	307392	5268850	20.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0449	296947	5267471	16.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0450	297991	5273960	15.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0475	284606	5288670	11.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0476	278709	5298703	13.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0477	297314	5300635	12.4	0	0	0	0	0	0	0	0	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1
0478	312068	5299951	16.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0479	278340	5245634	13.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0480	278018	5246027	11.7	0	0	0	0	0	0	0	1	0	0	1	1	2(5)	0	0	0	0	0	0	0	0	1	1	3	3	1	1

Sample	Mg-ilmenite							Cr-diopside													Olivine					Total		Total	
	Picked	KIM		PseudoKIM		N-KIM		Picked	KIM		Est. KIM		N-KIM (I-C)		Est. (I-C)		N-KIM (II-M)		Est. (II-M)		Picked	FO>80		FO<80		KIM grains		grains	
KAP	IM***	R	N*	R	N*	R	N*	DC***	R	N*	R**	N*	R	N*	P.**	N*	R	N*	R**	N*	FO***	R	N*	R	N*	R	N*	R	N*
0327	0	0	0	0	0	0	0	9	2	4	0	0	0	0	0	0	7	13	0	0	0	0	0	0	0	8	15	16	29
0328	0	0	0	0	0	0	0	11	2	2	0	0	3	3	0	0	7	6	0	0	0	0	0	0	0	2	2	13	12
0329	0	0	0	0	0	0	0	3	3	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	5	3	5
0330	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	3	3
0331	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1
0332	0	0	0	0	0	0	0	18	9	13	0	0	1	1	0	0	8	12	0	0	0	0	0	0	0	9	13	18	27
0333	0	0	0	0	0	0	0	10	1	2	0	0	3	5	0	0	6	9	0	0	0	0	0	0	0	1	2	10	16
0334	0	0	0	0	0	0	0	2	1	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	1	1	2	2
0335	0	0	0	0	0	0	0	19	9	16	0	0	3	5	0	0	7	12	0	0	0	0	0	0	0	9	16	19	34
0336	0	0	0	0	0	0	0	4	2	4	0	0	0	0	0	0	2	4	0	0	0	0	0	0	0	2	4	4	8
0337	0	0	0	0	0	0	0	38	9	10	0	0	9	10	0	0	18	19	0	0	0	0	0	0	0	9	10	36	39
0338	0	0	0	0	0	0	0	10	0	0	0	0	4	7	0	0	6	11	0	0	0	0	0	0	0	2	4	12	21
0340	0	0	0	0	0	0	0	9	1	1	0	0	1	1	0	0	7	8	0	0	0	0	0	0	0	1	1	10	11
0434	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0435	0	0	0	0	0	0	0	2	1	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	1	1	2	2
0436	0	0	0	0	0	0	0	22	1	1	0	0	4	5	0	0	17	22	0	0	0	0	0	0	0	1	1	22	28
0437	0	0	0	0	0	0	0	8	1	2	0	0	0	0	0	0	7	12	0	0	0	0	0	0	0	2	3	9	16
0438	0	0	0	0	0	0	0	16	0	0	0	0	4	7	0	0	11	20	0	0	0	0	0	0	0	0	0	15	28
0439	0	0	0	0	0	1	1	20(60)	2	2	6	7	3	3	9	10	14	16	42	49	0	0	0	0	0	3	3	21	24
0440	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	5	6	0	0	0	0	0	0	0	0	0	5	6
0441	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0442	0	0	0	0	0	0	0	17	2	2	0	0	6	6	0	0	9	8	0	0	0	0	0	0	0	3	3	18	17
0443	0	0	0	0	0	0	0	8	0	0	0	0	2	2	0	0	2	2	0	0	0	0	0	0	0	0	0	4	5
0444	0	0	0	0	0	0	0	20	3	4	0	0	6	7	0	0	9	11	0	0	0	0	0	0	0	3	4	18	21
0445	0	0	0	0	0	0	0	3	0	0	0	0	2	2	0	0	1	1	0	0	0	0	0	0	0	0	0	3	3
0446	0	0	0	0	0	0	0	50	5	4	0	0	5	4	0	0	40	36	0	0	0	0	0	0	0	5	4	50	44
0447	0	0	0	0	0	0	0	5	0	0	0	0	3	3	0	0	2	2	0	0	0	0	0	0	0	4	3	10	9
0448	0	0	0	0	0	0	0	10	1	1	0	0	6	4	0	0	3	2	0	0	0	0	0	0	0	1	1	10	7
0449	0	0	0	0	0	0	0	8	1	1	0	0	3	3	0	0	4	4	0	0	0	0	0	0	0	1	1	8	7
0450	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0475	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	1	1
0476	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	3	3
0477	0	0	0	0	0	0	0	32(530)	0	0	0	0	1	1	17	20	31	38	513	621	0	0	0	0	0	1	1	34	41
0478	0	0	0	0	0	0	0	7	1	1	0	0	3	3	0	0	3	3	0	0	0	0	0	0	0	1	1	7	6
0479	0	0	0	0	0	0	0	26	1	1	0	0	13	14	0	0	12	13	0	0	0	0	0	0	0	1	1	26	28
0480	1	0	0	0	0	15	19	19	1	1	0	0	12	15	0	0	6	8	0	0	0	0	0	0	0	2	3	37	47

Sample	UTM		Table	Garnets												Chromite																
	East	North	Feed	Picked	G9		G10		Megacrysts		Picked	Eclogitic		Crustal		Picked	DIF		Est. DIF		L/K		Est.L/K		OF		Est. OF		N-KIM	
KAP-			(Kg)	GP***	R	N*	R	N*	R	N*	GO***	R	N*	R	N*	CR***	R	N*	R**	N*	R	N*	R**	N*	R	N*	R**	N*	R	N*
0481	281114	5245797	11.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0482	282246	5245526	19.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0483	283095	5245934	12	0	0	0	0	0	0	0	0	0	0	4	5	5(20)	0	0	0	0	0	0	0	0	4	5	16	20	1	1
0484	284765	5246214	16.9	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0485	288169	5246390	18.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0486	290204	5244355	15	1	1	1	0	0	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0487	294845	5252282	12.5	3	3	4	0	0	0	0	0	0	0	0	0	5(50)	0	0	0	0	1	1	10	12	10	12	100	120	5	6
0488	297271	5252342	17.4	1	1	1	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0489	299114	5245981	19.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0490	287851	5244709	15.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0491	296825	5253109	21.5	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1	0	0	0	0
0492	292674	5252599	12	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1	0	0	0	0
0493	285073	5250418	17.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0494	283006	5252573	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0495	283408	5252126	16.9	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0496	273601	5263160	15.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0497	279718	5254780	15.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0498	281162	5271787	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0499	279840	5271037	15.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0500	278935	5270338	16.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0514	300562	5314812	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0515	304459	5315503	12.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0524	355553	5301835	13	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0525	357004	5305196	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0526	363750	5306190	8.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0527	364628	5309661	6.8	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2	4	0	0	0	0
0528	277129	5301944	12.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0529	281507	5301669	18.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0530	280524	5302403	18.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0531	278551	5296422	17.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0532	279729	5298709	16.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0535	317695	5308851	17.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0536	295382	5287976	16	1	1	1	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	3	3	0	0	0	0
0537	288086	5281790	15.2	1	1	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0538	289375	5280654	20.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0539	291857	5280670	18.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Sample	Mg-ilmenite							Cr-diopside													Olivine					Total		Total	
	Picked	KIM		PseudoKIM		N-KIM		Picked	KIM		Est. KIM		N-KIM (I-C)		Est. (I-C)		N-KIM (II-M)		Est. (II-M)		Picked	FO>80		FO<80		KIM grains		grains	
KAP	IM***	R	N*	R	N*	R	N*	DC***	R	N*	R**	N*	R	N*	R**	N*	R	N*	R**	N*	FO***	R	N*	R	N*	R	N*	R	N*
0481	0	0	0	0	0	4	5	12	2	3	0	0	3	4	0	0	7	9	0	0	0	0	0	0	0	2	3	16	20
0482	0	0	0	0	0	0	0	38	9	7	0	0	9	7	0	0	19	15	0	0	0	0	0	0	0	9	7	37	29
0483	0	0	0	1	1	1	1	16	0	0	0	0	8	10	0	0	9	11	0	0	0	0	0	0	0	4	5	28	35
0484	0	0	0	0	0	0	0	48	5	4	0	0	23	20	0	0	17	15	0	0	0	0	0	0	0	5	4	46	41
0485	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0486	1	0	0	0	0	1	1	8	1	1	0	0	5	5	0	0	2	2	0	0	0	0	0	0	0	2	2	11	11
0487	4	0	0	6	7	15	18	33	7	8	0	0	12	14	0	0	16	19	0	0	0	0	0	0	0	21	25	75	90
0488	0	0	0	0	0	0	0	13	2	2	0	0	1	1	0	0	10	9	0	0	0	0	0	0	0	3	3	16	14
0489	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0490	0	0	0	0	0	2	2	20(35)	2	2	4	3	10	10	18	17	9	9	16	15	0	0	0	0	0	2	2	23	22
0491	0	0	0	0	0	0	0	9	0	0	0	0	3	2	0	0	6	4	0	0	0	0	0	0	0	1	1	10	7
0492	0	0	0	0	0	0	0	9	2	3	0	0	4	5	0	0	4	5	0	0	0	0	0	0	0	3	4	11	14
0493	0	0	0	0	0	0	0	21	4	3	0	0	5	4	0	0	10	9	0	0	0	0	0	0	0	4	3	19	16
0494	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	1	1
0495	0	0	0	0	0	0	0	10	1	1	0	0	3	3	0	0	6	5	0	0	0	0	0	0	0	1	1	11	10
0496	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0497	0	0	0	0	0	0	0	4	1	1	0	0	1	1	0	0	2	2	0	0	0	0	0	0	0	1	1	4	4
0498	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0499	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	2	2
0500	0	0	0	0	0	0	0	3	0	0	0	0	1	1	0	0	2	2	0	0	0	0	0	0	0	0	0	3	3
0514	0	0	0	0	0	0	0	4	0	0	0	0	1	1	0	0	3	4	0	0	0	0	0	0	0	0	0	4	5
0515	0	0	0	0	0	0	0	5	2	2	0	0	0	0	0	0	3	4	0	0	0	0	0	0	0	2	2	5	6
0524	0	0	0	0	0	0	0	9	0	0	0	0	6	7	0	0	3	3	0	0	1	1	1	0	0	2	2	11	13
0525	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0526	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0527	0	0	0	0	0	0	0	15	4	9	0	0	4	9	0	0	7	15	0	0	0	0	0	0	0	6	13	17	38
0528	0	0	0	0	0	0	0	9	1	1	0	0	2	2	0	0	6	7	0	0	0	0	0	0	0	1	1	9	10
0529	0	0	0	0	0	0	0	26(60)	2	2	5	4	6	5	14	11	17	13	39	31	0	0	0	0	0	2	2	25	20
0530	0	0	0	0	0	0	0	10	5	4	0	0	2	2	0	0	3	2	0	0	0	0	0	0	0	5	4	10	8
0531	0	0	0	0	0	0	0	17	9	8	0	0	0	0	0	0	8	7	0	0	0	0	0	0	0	9	8	17	15
0532	0	0	0	0	0	0	0	4	1	1	0	0	2	2	0	0	1	1	0	0	0	0	0	0	0	1	1	4	4
0535	0	0	0	0	0	0	0	15	2	2	0	0	5	4	0	0	8	7	0	0	0	0	0	0	0	2	2	15	13
0536	0	0	0	0	0	0	0	25(70)	2	2	6	5	1	1	3	3	24	23	67	63	0	0	0	0	0	6	6	31	29
0537	0	0	0	0	0	0	0	5	1	1	0	0	1	1	0	0	3	3	0	0	0	0	0	0	0	2	2	7	7
0538	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	3	2	0	0	0	0	0	0	0	0	0	3	2
0539	0	0	0	0	0	0	0	4	0	0	0	0	1	1	0	0	3	2	0	0	0	0	0	0	0	0	0	4	3

Sample	UTM		Table	Garnets												Chromite														
	East	North	Feed	Picked	G9		G10		Megacrysts		Picked	Eclogitic		Crustal		Picked	DIF		Est. DIF		L/K		Est.L/K		OF		Est. OF		N-KIM	
KAP-			(Kg)	GP***	R	N*	R	N*	R	N*	GO***	R	N*	R	N*	CR***	R	N*	R**	N*	R	N*	R**	N*	R	N*	R**	N*	R	N*
0540	291684	5282318	18.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0541	346241	5314714	12.1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0542	346023	5311412	16.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0543	342535	5311972	19.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0544	335334	5309483	14.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0545	282195	5274321	15.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0546	283781	5273910	19.3	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1	0	0	0	0
0547	293108	5271965	17.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0548	289225	5271989	17.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0549	294595	5284082	16.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0550	299406	5277789	16.8	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1	0	0	0	0
0551	288607	5288869	15.5	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	3	3	0	0	1	1
0552	287714	5284604	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0553	313594	5270547	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0554	315992	5271208	17.2	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0555	318373	5272915	18.1	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	4	3	0	0	0	0
0556	325782	5272744	14.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0558	343272	5281634	17.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0559	342635	5281070	17.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0560	328664	5288501	17.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0561	346987	5292360	19.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0562	343251	5291606	19.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0566	335198	5288363	16.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0567	346153	5297835	10.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0568	346233	5300419	18.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0569	340831	5304119	13.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0570	339976	5297403	19.2	1	1	1	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2	2	0	0	0	0
0574	333243	5296458	16.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0575	337034	5291500	15.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0576	332248	5308026	21.6	1	1	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0577	335054	5307260	17.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0578	325153	5307393	15.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0589	357945	5317397	15.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0598	378168	5291244	3.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0599	375804	5289835	18.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0600	379186	5292716	18.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Sample	Mg-ilmenite							Cr-diopside													Olivine					Total		Total	
	Picked	KIM		PseudoKIM		N-KIM		Picked	KIM		Est. KIM		N-KIM (I-C)		Est. (I-C)		N-KIM (II-M)		Est. (II-M)		Picked	FO>80		FO<80		KIM grains		grains	
KAP	IM***	R	N*	R	N*	R	N*	DC***	R	N*	R**	N*	R	N*	R**	N*	R	N*	R**	N*	FO***	R	N*	R	N*	R	N*	R	N*
0540	0	0	0	0	0	0	0	18	2	2	0	0	6	5	0	0	11	9	0	0	0	0	0	0	0	2	2	19	16
0541	0	0	0	0	0	0	0	26(35)	13	16	18	22	7	9	9	12	6	7	8	10	0	0	0	0	0	14	17	27	33
0542	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0543	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0544	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0545	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0546	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	3	2	0	0	0	0	0	0	0	1	1	4	3
0547	0	0	0	0	0	0	0	6	0	0	0	0	2	2	0	0	4	4	0	0	0	0	0	0	0	0	0	6	5
0548	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0549	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	7	6	0	0	0	0	0	0	0	0	0	7	6
0550	1	0	0	1	1	1	1	31	3	3	0	0	12	11	0	0	16	14	0	0	0	0	0	0	0	4	4	34	30
0551	0	0	0	0	0	0	0	27(40)	4	4	6	6	6	6	9	9	17	16	25	24	0	0	0	0	0	7	7	31	30
0552	0	0	0	0	0	0	0	10	1	1	0	0	5	4	0	0	4	4	0	0	0	0	0	0	0	1	1	10	9
0553	0	0	0	0	0	0	0	4	0	0	0	0	3	3	0	0	1	1	0	0	0	0	0	0	0	0	0	4	4
0554	0	0	0	0	0	0	0	10	1	1	0	0	3	3	0	0	6	5	0	0	0	0	0	0	0	2	2	11	10
0555	0	0	0	0	0	0	0	22(35)	2	2	3	3	4	3	6	5	15	12	24	20	0	0	0	0	0	6	5	25	21
0556	0	0	0	0	0	0	0	2	0	0	0	0	1	1	0	0	1	1	0	0	0	0	0	0	0	0	0	2	2
0558	0	0	0	0	0	0	0	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2	2
0559	0	0	0	0	0	0	0	16(25)	4	3	6	5	2	2	3	3	9	8	14	12	0	0	0	0	0	4	3	15	13
0560	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0561	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0562	0	0	0	0	0	0	0	9	4	3	0	0	3	2	0	0	3	2	0	0	0	0	0	0	0	4	3	10	8
0566	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
0567	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0568	0	0	0	0	0	0	0	3	1	1	0	0	1	1	0	0	1	1	0	0	1	1	1	0	0	2	2	4	3
0569	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0570	0	0	0	0	0	5	4	37	7	5	0	0	13	10	0	0	16	13	0	0	3	1	1	1	1	11	9	46	36
0574	0	0	0	0	0	0	0	4	1	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	1	1	2	2
0575	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0576	0	0	0	0	0	0	0	12	2	1	0	0	2	1	0	0	7	5	0	0	0	0	0	0	0	3	2	13	9
0577	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0578	0	0	0	0	0	1	1	6	0	0	0	0	4	4	0	0	2	2	0	0	0	0	0	0	0	0	0	7	7
0589	0	0	0	0	0	0	0	4	1	1	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	1	1	3	3
0598	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0599	0	0	0	0	0	0	0	5	1	1	0	0	2	2	0	0	1	1	0	0	0	0	0	0	0	1	1	4	3
0600	0	0	0	0	0	1	1	3	0	0	0	0	1	1	0	0	2	2	0	0	0	0	0	0	0	0	0	4	3

Sample	UTM		Table	Garnets											Chromite															
	East	North	Feed	Picked	G9		G10		Megacrysts		Picked	Eclogitic		Crustal		Picked	DIF		Est. DIF		L/K		Est.L/K		OF		Est. OF		N-KIM	
KAP-			(Kg)	GP***	R	N*	R	N*	R	N*	GO***	R	N*	R	N*	CR***	R	N*	R**	N*	R	N*	R**	N*	R	N*	R**	N*	R	N*
0601	275858	5267776	17.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0602	274321	5262692	15.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0603	355398	5293337	19.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0604	355442	5291731	12.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0605	359255	5293619	12.9	0	0	0	0	0	0	0	0	0	0	0	0	19(30)	0	0	0	0	0	0	0	0	15	17	24	28	1	1
0606	376566	5300893	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0607	381071	5308495	14.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0630	342870	5314526	12.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0631	341677	5316547	16.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0635	344045	5317398	10.5	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0636	343843	5316019	10.8	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	2	3	0	0	1	1
0655	377986	5312462	13.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0701	382649	5291483	7.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0711	368666	5317560	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0712	366742	5315222	15.4	0	0	0	0	0	0	0	0	0	0	0	0	8(20)	0	0	0	0	0	0	0	0	5	5	13	12	2	2
0715	370210	5308104	9	0	0	0	0	0	0	0	0	0	0	0	0	18	0	0	0	0	0	0	0	0	15	25	0	0	2	3
0716	367621	5306515	7.8	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	2	4	0	0	1	2
0717	377281	5308601	11.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0718	381990	5310344	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0719	382584	5305277	9.8	0	0	0	0	0	0	0	0	0	0	1	2	4	0	0	0	0	0	0	0	0	3	5	0	0	1	2
0790	293585	5303206	17.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0939	378841	5254085	18.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0940	373798	5251360	14.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0941	373783	5251426	18.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0951	373075	5234837	12.9	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2	2	0	0	0	0
0952	368153	5232816	18.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0953	362796	5234778	20.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0954	365204	5230719	18.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0955	351988	5229069	22.7	0	1	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1	0	0	0	0
0956	356659	5221727	14.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0957	359639	5219301	16.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0958	362965	5226347	18.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0959	379104	5227588	12.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0960	377729	5221726	16.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0961	364409	5223872	15.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0962	366005	5217808	19.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Sample	Mg-ilmenite							Cr-diopside													Olivine					Total		Total	
	Picked	KIM		PseudoKIM		N-KIM		Picked	KIM		Est. KIM		N-KIM (I-C)		Est. (I-C)		N-KIM (II-M)		Est. (II-M)		Picked	FO>80		FO<80		KIM grains		grains	
KAP	IM***	R	N*	R	N*	R	N*	DC***	R	N*	R**	N*	R	N*	R**	N*	R	N*	R**	N*	FO***	R	N*	R	N*	R	N*	R	N*
0601	0	0	0	0	0	0	0	10(60)	2	2	12	10	2	2	12	10	6	5	36	30	0	0	0	0	0	2	2	10	8
0602	0	0	0	0	0	0	0	6	1	1	0	0	2	2	0	0	3	3	0	0	0	0	0	0	0	1	1	6	6
0603	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0604	1	0	0	1	1	0	0	8	1	1	0	0	3	4	0	0	5	6	0	0	0	0	0	0	0	1	1	10	12
0605	0	0	0	1	1	1	1	9	0	0	0	0	4	5	0	0	2	2	0	0	0	0	0	0	0	15	17	24	28
0606	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0607	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
0630	0	0	0	0	0	0	0	12	3	4	0	0	5	6	0	0	2	2	0	0	0	0	0	0	0	3	4	10	12
0631	0	0	0	0	0	0	0	9	3	3	0	0	3	3	0	0	2	2	0	0	0	0	0	0	0	3	3	8	7
0635	0	0	0	0	0	4	6	10(25)	3	4	8	11	5	7	13	18	1	1	3	4	0	0	0	0	0	4	6	14	20
0636	1	0	0	1	1	4	6	12	1	1	0	0	5	7	0	0	6	8	0	0	1	1	1	0	0	4	6	21	29
0655	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0701	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0711	0	0	0	0	0	0	0	8	1	1	0	0	2	2	0	0	5	5	0	0	0	0	0	0	0	1	1	8	8
0712	0	0	0	0	0	0	0	7	3	3	0	0	1	1	0	0	3	3	0	0	0	0	0	0	0	8	8	14	14
0715	0	0	0	0	0	2	3	1	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	15	25	20	33
0716	0	0	0	0	0	0	0	1	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	2	4	4	8
0717	0	0	0	0	0	0	0	4	0	0	0	0	1	1	0	0	2	3	0	0	0	0	0	0	0	0	0	3	4
0718	0	0	0	0	0	0	0	12	1	1	0	0	5	4	0	0	6	5	0	0	0	0	0	0	0	1	1	12	11
0719	0	0	0	0	0	0	0	20	0	0	0	0	12	18	0	0	7	11	0	0	1	1	2	0	0	4	6	25	38
0790	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	8	7	0	0	0	0	0	0	0	0	0	8	7
0939	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1
0940	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0941	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0951	0	0	0	0	0	4	5	4	0	0	0	0	2	2	0	0	2	2	0	0	0	0	0	0	0	2	2	10	12
0952	0	0	0	0	0	0	0	3	1	1	0	0	1	1	0	0	1	1	0	0	1	0	0	0	0	1	1	3	2
0953	0	0	0	0	0	3	2	5	1	1	0	0	1	1	0	0	3	2	0	0	0	0	0	0	0	1	1	8	6
0954	0	0	0	0	0	0	0	5	0	0	0	0	4	3	0	0	1	1	0	0	0	0	0	0	0	0	0	5	4
0955	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	2	1
0956	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0957	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0958	0	0	0	0	0	0	0	20(40)	4	3	8	6	6	5	12	10	8	6	16	13	0	0	0	0	0	4	3	18	14
0959	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0960	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0961	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0962	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	1	1

Sample	UTM		Table	Garnets												Chromite														
	East	North	Feed	Picked	G9		G10		Megacrysts		Picked	Eclogitic		Crustal		Picked	DIF		Est. DIF		L/K		Est.L/K		OF		Est. OF		N-KIM	
KAP-			(Kg)	GP***	R	N*	R	N*	R	N*	GO***	R	N*	R	N*	CR***	R	N*	R**	N*	R	N*	R**	N*	R	N*	R**	N*	R	N*
0963	364604	5214809	19.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0964	352500	5207909	18.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0965	343826	5211172	13.2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1	0	0	0	0
0966	333388	5218977	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0967	328780	5211751	16.3	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0968	382874	5252253	17.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0969	376370	5253414	11.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0970	376366	5253288	13.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0971	379879	5244809	14.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0972	371253	5241811	8.1	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	7	13	0	0	0	0
0973	367104	5239055	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0974	365899	5241962	10.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0975	360527	5237849	15.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0976	357689	5231688	14.1	2	1	1	1	1	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	5	5	0	0	0	0
0977	355848	5229435	14.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0978	349559	5226746	16.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0979	355555	5215044	15.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0980	361179	5222632	16.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0981	337482	5220332	12.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0982	338219	5214275	16.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0983	337445	5240139	16.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0984	323207	5249072	12.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0985	307647	5239788	15.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0986	298334	5254754	20.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0987	301843	5256281	11.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0988	326911	5221491	18.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0989	318227	5226249	13.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0990	308931	5225123	16.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0991	299019	5221796	14.3	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2	2	0	0	1	1
0992	320140	5237609	12.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0993	315070	5238715	18.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0994	316881	5243320	16.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0995	289429	5251227	9.9	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0996	283774	5253113	17.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0997	280473	5244815	15.7	1	1	1	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	3	3	0	0	0	0
0998	272483	5240754	13.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Sample	Mg-ilmenite							Cr-diopside														Olivine					Total		Total	
	Picked	KIM		PseudoKIM		N-KIM		Picked	KIM		Est. KIM		N-KIM (I-C)		Est. (I-C)		N-KIM (II-M)		Est. (II-M)		Picked	FO>80		FO<80		KIM grains		grains	
KAP	IM***	R	N*	R	N*	R	N*	DC***	R	N*	R**	N*	R	N*	R**	N*	R	N*	R**	N*	FO***	R	N*	R	N*	R	N*	R	N*
0963	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0964	0	0	0	0	0	4	3	2	0	0	0	0	1	1	0	0	1	1	0	0	0	0	0	0	0	0	0	6	5
0965	0	0	0	0	0	4	5	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	1	1	7	8
0966	0	0	0	0	0	0	0	3	1	1	0	0	2	3	0	0	0	0	0	0	0	0	0	0	0	1	1	3	4
0967	0	0	0	0	0	0	0	10	4	4	0	0	1	1	0	0	5	5	0	0	0	0	0	0	0	4	4	11	10
0968	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	2	2
0969	0	0	0	0	0	0	0	3	0	0	0	0	1	1	0	0	1	1	0	0	0	0	0	0	0	0	0	2	3
0970	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1
0971	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0972	0	0	0	0	0	5	9	3	0	0	0	0	1	2	0	0	2	4	0	0	0	0	0	0	0	7	13	15	28
0973	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
0974	0	0	0	0	0	3	4	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	4	6
0975	0	0	0	0	0	0	0	7	1	1	0	0	3	3	0	0	3	3	0	0	0	0	0	0	0	1	1	7	7
0976	0	0	0	0	0	7	7	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	7	8	16	17
0977	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0978	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0979	0	0	0	0	0	1	1	5	0	0	0	0	3	3	0	0	2	2	0	0	0	0	0	0	0	0	0	6	6
0980	0	0	0	0	0	0	0	10	0	0	0	0	3	3	0	0	7	6	0	0	0	0	0	0	0	0	0	10	9
0981	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	2	2
0982	0	0	0	0	0	0	0	7	0	0	0	0	3	3	0	0	5	4	0	0	0	0	0	0	0	0	0	8	7
0983	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	1	1
0984	0	0	0	0	0	0	0	9	1	1	0	0	5	6	0	0	3	4	0	0	1	1	1	0	0	2	2	10	12
0985	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	1	1
0986	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	2	1
0987	0	0	0	0	0	0	0	10(25)	1	1	3	3	5	6	13	16	9	12	23	29	0	0	0	0	0	1	1	15	19
0988	0	0	0	0	0	0	0	11	0	0	0	0	3	2	0	0	9	7	0	0	0	0	0	0	0	0	0	12	10
0989	0	0	0	0	0	0	0	6	2	2	0	0	1	1	0	0	3	3	0	0	0	0	0	0	0	2	2	6	7
0990	0	0	0	0	0	0	0	3	2	2	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	2	2	3	3
0991	0	0	0	0	0	0	0	7	0	0	0	0	4	4	0	0	3	3	0	0	0	0	0	0	0	2	2	10	10
0992	0	0	0	0	0	0	0	2	1	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	1	1	2	2
0993	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0994	0	0	0	0	0	0	0	11(25)	2	2	5	4	3	3	7	6	6	5	14	12	0	0	0	0	0	2	2	11	10
0995	0	0	0	0	0	0	0	22(50)	3	5	7	10	8	12	18	28	8	12	18	28	0	0	0	0	0	4	6	20	30
0996	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0997	0	0	0	0	0	0	0	22(40)	3	3	5	5	5	5	9	9	9	9	16	16	0	0	0	0	0	7	7	21	20
0998	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Sample	UTM		Table	Garnets												Chromite														
	East	North	Feed	Picked	G9		G10		Megacrysts		Picked	Eclogitic		Crustal		Picked	DIF		Est. DIF		L/K		Est.L/K		OF		Est. OF		N-KIM	
KAP-			(Kg)	GP***	R	N*	R	N*	R	N*	GO***	R	N*	R	N*	CR***	R	N*	R**	N*	R	N*	R**	N*	R	N*	R**	N*	R	N*
0999	269389	5242017	11.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1000	270625	5216872	19	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1
1001	423700	5257956	7.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1002	416912	5260986	8.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1003	385594	5273845	8.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1004	384295	5270784	10.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1005	381005	5273700	7.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1006	351376	5275437	11.1	1	1	1	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	3	4	0	0	0	0
1007	334110	5256120	9.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1008	337929	5260821	8.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1009	337815	5260949	9.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1010	333782	5270585	10.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1011	354690	5245579	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1012	351449	5236045	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1013	324662	5273640	12.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1014	320757	5301289	13.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1015	309104	5265996	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1016	275917	5261260	11.2	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1017	284309	5261415	13.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1018	320068	5298598	14.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1019	342710	5302396	13.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1020	293510	5301428	11.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1021	269320	5289595	N/A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1022	262534	5286965	14.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1023	246104	5291256	9.3	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	2	0	0	0	0
1024	243410	5289480	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1025	240801	5288094	12.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1051	282623	5226447	12.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1052	257795	5220464	7.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1053	325661	5250243	11.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1054	313850	5241459	16.1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1055	300671	5249371	12.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1056	300719	5249400	13.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1057	294011	5244656	15.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1058	286326	5251748	13.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1059	285637	5244962	8.9	0	0	0	0	0	0	0	0	0	0	1	2	3	0	0	0	0	0	0	0	0	2	3	0	0	1	2

Sample	Mg-ilmenite							Cr-diopside													Olivine					Total KIM grains		Total grains	
	Picked	KIM		PseudoKIM		N-KIM		Picked	KIM		Est. KIM		N-KIM (I-C)		Est. (I-C)		N-KIM (II-M)		Est. (II-M)		Picked	FO>80		FO<80					
KAP	IM***	R	N*	R	N*	R	N*	DC***	R	N*	R**	N*	R	N*	R**	N*	R	N*	R**	N*	FO***	R	N*	R	N*	R	N*	R	N*
0999	0	0	0	0	0	0	0	5	2	3	0	0	0	0	0	0	2	3	0	0	0	0	0	0	0	2	3	4	5
1000	0	0	0	0	0	0	0	12	1	1	0	0	3	2	0	0	6	5	0	0	0	0	0	0	0	1	1	11	9
1001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1004	0	0	0	0	0	0	0	3	1	1	0	0	1	1	0	0	1	1	0	0	0	0	0	0	0	1	1	3	4
1005	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1006	0	0	0	0	0	5	7	1	0	0	0	0	1	1	0	0	0	0	0	0	3	3	4	0	0	7	9	13	18
1007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1008	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1009	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1010	0	0	0	0	0	0	0	6	4	6	0	0	1	1	0	0	1	1	0	0	0	0	0	0	0	4	6	6	9
1011	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1012	0	0	0	0	0	0	0	7	0	0	0	0	3	3	0	0	3	3	0	0	0	0	0	0	0	0	0	6	6
1013	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1014	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
1015	0	0	0	0	0	0	0	2	1	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	1	1	2	3
1016	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	3
1017	0	0	0	0	0	0	0	9	0	0	0	0	1	1	0	0	8	9	0	0	0	0	0	0	0	0	0	9	10
1018	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1019	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	1	1
1020	0	0	0	0	0	0	0	8	0	0	0	0	1	1	0	0	6	8	0	0	1	1	1	0	0	1	1	8	11
1021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1022	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1023	0	0	0	0	0	0	0	4	0	0	0	0	1	2	0	0	3	5	0	0	0	0	0	0	0	1	2	5	8
1024	0	0	0	0	0	0	0	7	0	0	0	0	1	1	0	0	7	9	0	0	0	0	0	0	0	0	0	8	10
1025	0	0	0	0	0	0	0	9	2	2	0	0	3	4	0	0	4	5	0	0	0	0	0	0	0	2	2	9	11
1051	0	0	0	0	0	0	0	4	1	1	0	0	2	2	0	0	1	1	0	0	0	0	0	0	0	1	1	4	5
1052	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	1	2
1053	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1054	0	0	0	0	0	0	0	7	2	2	0	0	1	1	0	0	3	3	0	0	0	0	0	0	0	3	3	7	7
1055	0	0	0	0	0	0	0	2	0	0	0	0	1	1	0	0	1	1	0	0	0	0	0	0	0	0	0	2	2
1056	0	0	0	0	0	0	0	5	2	2	0	0	0	0	0	0	3	3	0	0	0	0	0	0	0	2	2	5	5
1057	0	0	0	0	0	0	0	18	5	5	0	0	6	6	0	0	6	6	0	0	0	0	0	0	0	5	5	17	17
1058	0	0	0	0	0	0	0	23	2	2	0	0	7	8	0	0	13	14	0	0	0	0	0	0	0	2	2	22	24
1059	0	0	0	0	0	0	0	11	2	3	0	0	4	7	0	0	5	8	0	0	0	0	0	0	0	4	7	15	25

Sample	UTM		Table	Garnets												Chromite														
	East	North	Feed (Kg)	Picked	G9		G10		Megacrysts		Picked	Eclogitic		Crustal		Picked	DIF		Est. DIF		L/K		Est.L/K		OF		Est. OF		N-KIM	
KAP-				GP***	R	N*	R	N*	R	N*	GO***	R	N*	R	N*	CR***	R	N*	R**	N*	R	N*	R**	N*	R	N*	R**	N*	R	N*
1060	285570	5244848	14.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1061	275493	5244913	14.4	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1	0	0	0	0
1062	270668	5239994	13.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1063	270370	5238398	16.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1064	264960	5214149	10.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1065	260230	5235331	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1066	257000	5232626	16.3	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1067	241993	5229698	14.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1068	239607	5229472	15.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1069	238097	5227950	16.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1070	244328	5282890	12.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1071	240017	5280058	13.5	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1072	247989	5278578	11.4	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	1	1	0	0	0	0
1073	250785	5274316	10.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1074	246905	5272749	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1075	242712	5272608	9.2	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1076	239387	5272016	13.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1077	237632	5271639	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1078	237201	5265282	18.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
1079	242112	5263547	13.9	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1080	237336	5259048	16.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1081	237825	5255442	6.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1082	237780	5255568	18.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1083	250475	5254429	8.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1084	250427	5254358	17.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1085	238223	5253617	15.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1086	236407	5252587	15.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1087	244571	5282718	14.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1088	241642	5277764	9.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1089	247260	5274573	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1090	252948	5273423	16.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1091	243154	5272619	10.2	0	0	0	0	0	0	0	0	1	1	1	1	2	0	0	0	0	0	0	0	0	2	3	0	0	0	0
1092	241200	5272203	17.2	2	2	2	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1093	237498	5267779	13.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1094	237938	5264075	11.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1095	237967	5264033	11.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Sample	Mg-ilmenite							Cr-diopside													Olivine					Total KIM grains		Total grains	
	Picked	KIM		PseudoKIM		N-KIM		Picked	KIM		Est. KIM		N-KIM (I-C)		Est. (I-C)		N-KIM (II-M)		Est. (II-M)		Picked	FO>80		FO<80					
KAP	IM***	R	N*	R	N*	R	N*	DC***	R	N*	R**	N*	R	N*	R**	N*	R	N*	R**	N*	FO***	R	N*	R	N*	R	N*	R	N*
1060	0	0	0	0	0	0	0	26	3	3	0	0	5	5	0	0	17	17	0	0	0	0	0	0	0	3	3	25	25
1061	0	0	0	0	0	0	0	12	1	1	0	0	2	2	0	0	8	8	0	0	0	0	0	0	0	2	2	12	13
1062	0	0	0	0	0	0	0	25(75)	1	1	3	3	9	10	27	30	13	14	39	43	0	0	0	0	0	1	1	23	25
1063	0	0	0	0	0	0	0	14	6	5	0	0	5	5	0	0	3	3	0	0	0	0	0	0	0	6	5	14	13
1064	0	0	0	0	0	0	0	3	0	0	0	0	1	1	0	0	2	3	0	0	0	0	0	0	0	0	0	3	4
1065	0	0	0	0	0	0	0	9	0	0	0	0	5	4	0	0	3	3	0	0	0	0	0	0	0	0	0	8	7
1066	0	0	0	0	0	0	0	20	3	3	0	0	4	4	0	0	13	12	0	0	0	0	0	0	0	3	3	20	18
1067	0	0	0	0	0	0	0	5	0	0	0	0	1	1	0	0	4	4	0	0	0	0	0	0	0	0	0	5	5
1068	0	0	0	0	0	0	0	15	4	4	0	0	1	1	0	0	10	10	0	0	0	0	0	0	0	4	4	15	15
1069	0	0	0	0	0	0	0	2	0	0	0	0	1	1	0	0	1	1	0	0	0	0	0	0	0	0	0	2	2
1070	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1071	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	2	2
1072	0	0	0	0	0	0	0	12	0	0	0	0	5	7	0	0	9	12	0	0	0	0	0	0	0	1	1	15	20
1073	0	0	0	0	0	0	0	13	4	6	0	0	3	4	0	0	5	7	0	0	0	0	0	0	0	4	6	12	17
1074	0	0	0	0	0	0	0	9	5	11	0	0	2	4	0	0	2	4	0	0	0	0	0	0	0	5	11	9	19
1075	0	0	0	0	0	0	0	4	0	0	0	0	1	2	0	0	3	5	0	0	0	0	0	0	0	1	2	5	8
1076	0	0	0	0	0	0	0	3	0	0	0	0	1	1	0	0	2	2	0	0	0	0	0	0	0	0	0	3	3
1077	0	0	0	0	0	0	0	18	2	2	0	0	7	8	0	0	9	10	0	0	0	0	0	0	0	2	2	18	19
1078	0	0	0	0	0	0	0	18	1	1	0	0	7	6	0	0	9	7	0	0	0	0	0	0	0	2	2	18	15
1079	0	0	0	0	0	0	0	19	2	2	0	0	5	5	0	0	10	11	0	0	0	0	0	0	0	2	2	17	18
1080	0	0	0	0	0	0	0	2	1	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	1	1	2	2
1081	0	0	0	0	0	0	0	1	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2
1082	0	0	0	0	0	0	0	10(30)	5	4	15	12	1	1	3	2	4	3	12	10	0	0	0	0	0	5	4	10	8
1083	0	0	0	0	0	0	0	2	0	0	0	0	1	2	0	0	1	2	0	0	0	0	0	0	0	0	0	2	3
1084	0	0	0	0	0	0	0	5	0	0	0	0	1	1	0	0	4	3	0	0	0	0	0	0	0	0	0	5	4
1085	0	0	0	0	0	0	0	8	0	0	0	0	4	4	0	0	4	4	0	0	0	0	0	0	0	0	0	8	8
1086	0	0	0	0	0	0	0	18	2	2	0	0	4	4	0	0	13	13	0	0	0	0	0	0	0	2	2	19	19
1087	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	2	2
1088	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1089	0	0	0	0	0	0	0	5	1	1	0	0	0	0	0	0	4	5	0	0	0	0	0	0	0	1	1	5	7
1090	0	0	0	0	0	0	0	25(60)	8	7	19	17	6	5	14	13	4	4	10	9	0	0	0	0	0	8	7	18	16
1091	0	0	0	0	0	0	0	21	2	3	0	0	6	9	0	0	13	19	0	0	0	0	0	0	0	5	7	25	37
1092	0	0	0	0	0	0	0	16	0	0	0	0	7	6	0	0	9	8	0	0	0	0	0	0	0	2	2	20	17
1093	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	2	2
1094	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	3	4	0	0	0	0	0	0	0	0	0	3	4
1095	0	0	0	0	0	0	0	20	3	4	0	0	5	6	0	0	12	15	0	0	0	0	0	0	0	3	4	20	25

Sample	UTM		Table	Garnets												Chromite															
	East	North	Feed (Kg)	Picked	G9		G10		Megacrysts		Picked	Eclogitic		Crustal		Picked	DIF		Est. DIF		L/K		Est.L/K		OF		Est. OF		N-KIM	
KAP-				GP***	R	N*	R	N*	R	N*	GO***	R	N*	R	N*	CR***	R	N*	R**	N*	R	N*	R**	N*	R	N*	R**	N*	R	N*
1096	241063	5258386	12.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1097	239971	5250076	10.2	1	1	1	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	3	4	0	0	0	0
1098	245943	5249848	14.3	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1101	220992	5217512	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1102	269816	5255635	12.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1103	268568	5257245	13.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1104	265406	5252930	10.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1105	256084	5252273	12.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1106	254269	5250570	8.5	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	1	2	0	0	3	5
1107	250013	5250281	13.7	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1	0	0	0	0
1108	254957	5255436	9.4	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	2	0	0	1	2
1109	250259	5263726	8.7	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	2	0	0	0	0
1110	257789	5267300	17.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1111	262791	5265363	14.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1112	273526	5268761	12.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1113	269470	5276380	17.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total Grains		58	53	62	3	4	3	3	6	9	12	54	66	331	3	4	6	9	17	22	18	23	380	576	392	597	69	102

Sample	Mg-ilmenite							Cr-diopside													Olivine					Total		Total	
	Picked	KIM		PseudoKIM		N-KIM		Picked	KIM		Est. KIM		N-KIM (I-C)		Est. (I-C)		N-KIM (II-M)		Est. (II-M)		Picked	FO>80		FO<80		KIM grains		grains	
KAP	IM***	R	N*	R	N*	R	N*	DC***	R	N*	R**	N*	R	N*	R**	N*	R	N*	R**	N*	FO***	R	N*	R	N*	R	N*	R	N*
1096	0	0	0	0	0	0	0	20(30)	2	2	3	4	7	9	11	13	9	11	14	16	0	0	0	0	0	2	2	18	22
1097	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	10	15	0	0	0	0	0	0	0	4	6	14	21
1098	0	0	0	0	0	0	0	17(75)	3	3	13	14	4	4	18	19	8	8	35	37	0	0	0	0	0	3	3	15	16
1101	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1102	0	0	0	0	0	0	0	15	1	1	0	0	6	7	0	0	8	10	0	0	0	0	0	0	0	1	1	15	18
1103	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1104	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1105	0	0	0	0	0	0	0	16	4	5	0	0	0	0	0	0	12	15	0	0	0	0	0	0	0	4	5	16	20
1106	0	0	0	0	0	0	0	9	1	2	0	0	1	2	0	0	8	14	0	0	0	0	0	0	0	2	4	14	25
1107	1	1	1	0	0	0	0	9	0	0	0	0	4	4	0	0	6	7	0	0	0	0	0	0	0	2	2	12	13
1108	0	0	0	0	0	0	0	6	0	0	0	0	2	3	0	0	4	6	0	0	0	0	0	0	0	1	2	8	13
1109	0	0	0	0	0	0	0	4	0	0	0	0	1	2	0	0	3	5	0	0	0	0	0	0	0	1	2	5	9
1110	0	0	0	0	0	0	0	20(30)	4	3	6	5	8	7	12	10	8	7	12	10	0	0	0	0	0	4	3	20	17
1111	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1112	0	0	0	0	0	0	0	3	3	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	4	3	4
1113	0	0	0	0	0	0	0	6	0	0	0	0	2	2	0	0	4	3	0	0	0	0	0	0	0	0	0	6	5
Total	39	11	14	46	61	229	336	3045	546	636	211	222	1063	1246	336	366	2003	2350	1304	1496	54	76	97	10	16	1102	1433	4575	5609

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APPENDIX E: Metamorphic/Magmatic Massive Sulphide Indicator Minerals in 556 Modern Alluvium Samples from the Chapleau Area.

Summary of Abbreviations

Kg:	Kilogram
est.:	Estimate
Gth:	Goethite
MMSIM:	Metamorphic Massive Sulphide Indicator Mineral
KIM:	Kimberlite Indicator Mineral
Ky:	Kyanite
Sil:	Sillimanite
St:	Staurolite
Sps:	Spessartine
Fay:	Fayalite (Olivine)
Fo:	Forsterite (Olivine)
Opx:	Orthopyroxene
Cpy:	Clinopyroxene
Au:	Gold
Diop.:	Diopside
Low Cr-Diop:	Low Cr-Diopside
R:	Raw
N:	Normalized
amph.:	amphibole
f.e.:	ferroedenite
gross gnt (gg):	grossular garnet
ep:	epidote
paris:	parisite
zirk:	zirkelite
sph:	sphalerite
LC:	leucosphire corundum
stp:	strontiopyrochlore
monz:	monazite
bas:	bastnaesite

ODM:	Overburden Drilling Management Limited
GL:	Ontario Geoscience Laboratories

Sample Number	Table Feed	Chalcopyrite		Molybdenite	Pyrite	Spinels (raw data) # grains				Corundum		low Cr-Diopside		Ky	Sil	St	Sps
KAP-	(Kg)	# est. grains	Picked grains	Picked grains	%	Other Spinel	Hercynite	Gahnite MgO<2wt%	Gahnite MgO>2wt%	Ruby Corundum	sapphirine/ sapphire grains	Picked grains	Probed grains	%	%	%	%
					(# grains)	ODM	ODM	GL	GL			ODM	GL				
0001	8.2	0	0	0	Tr (2 gr)	0	0	0	0	0	0	3	1	Tr	Tr	Tr	Tr
0002	9.5	0	0	0	Tr (~10 gr)	0	0	0	0	0	0	8	3	Tr	0	0	Tr
0003	10.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0004	11.1	0	0	0	Tr (2 gr)	0	0	0	0	0	0	0	0	0	0	Tr	Tr
0005	9.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Tr	Tr
0006	10.1	0	1	0	Tr (~20 gr)	1	0	0	0	0	0	8	8	0	0	Tr	0
0007	10.7	0	0	0	0	0	0	0	0	0	0	7	4	Tr	0	Tr	Tr
0008	15.4	0	0	0	Tr (~50 gr)	2	0	0	2	1	0	3	2	Tr	0	Tr	0
0009	12.9	0	0	0	Tr (1gr)	0	0	0	0	0	0	17	13	Tr	Tr	0	0
0010	13.8	0	0	0	0	1	0	1	0	0	1	10	9	Tr	0	Tr	0
0011	11.9	0	0	0	0	0	0	0	0	0	1	1	1	Tr	0	Tr	0
0012	12.3	0	0	0	Tr (1 gr)	0	0	0	0	0	1	27	12	Tr	0	Tr	0
0013	10.6	0	0	4	Tr (~20 gr)	1	0	0	0	0	0	9	5	0	0	Tr	0
0014	14.6	0	0	0	0	0	0	0	0	0	0	6	4	0	0	Tr	0
0015	15.8	0	0	0	0	1	0	0	0	0	0	11	11	Tr	Tr	Tr	0
0016	13.1	0	0	0	0	0	0	0	0	0	0	1	1	Tr	0	0	0
0017	13.2	0	0	0	Tr	0	0	0	0	0	0	9	12	Tr	0	Tr	0
0018	9.4	0	0	0	Tr (1 gr)	0	0	0	0	0	0	7	5	Tr	0	0	0
0019	11.1	0	0	0	Tr (~10 gr)	0	0	0	0	0	0	3	3	0	0	0	0
0020	10.6	0	0	0	0.5	0	0	0	0	0	0	3	2	0	0	Tr	Tr
0021	17.8	0	0	0	Tr (5 gr)	0	0	0	0	0	0	6	4	0	0	0	0
0022	14.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0023	12.2	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	Tr
0024	7.1	0	0	0	Tr (~10 gr)	0	0	0	0	0	0	2	2	0	0	Tr	0
0025	11.1	1	1	0	Tr (~20 gr)	0	0	0	1	1	0	15	12	0	0	Tr	Tr
0026	8.9	0	0	0	Tr (~15 gr)	1	0	1	0	0	0	22	12	0	0	Tr	0
0027	10.6	2	2	0	0	0	0	1	0	0	0	15	6	0	Tr	Tr	Tr
0031	8.8	1	1	0	Tr (~50 gr)	0	0	0	0	0	0	2	1	0	Tr	Tr	0
0032	8	0	0	1	Tr (~20 gr)	1	0	0	0	0	0	27	21	Tr	Tr	Tr	Tr
0033	8.2	0	0	1	Tr (~150 gr)	0	0	0	0	0	0	1	1	Tr	Tr	Tr	Tr
0034	9.8	0	0	0	0	0	0	0	0	0	2	~ 35	21	0	Tr	Tr	0.5
0035	13.7	0	0	0	Tr (1 gr)	0	0	0	0	0	0	11	9	Tr	Tr	Tr	0
0036	15	0	0	0	0	0	0	0	0	0	3	20	16	Tr	Tr	Tr	0

Sample Number	Fay	Opx	Chromite		Red Rutile	Fo	Native Gold	Mn Epidote	Others	Total MMSIMs					
KAP-	%	%	# MMSIM grains (raw data)	Est. # of grains	# grains	# grains	# picked grains	# picked grains	# grains	VMS corundum,gahnite, rutile,Mn-epidote, cpy, Au, Ky**,Sil**,St**,Opx**,Sps**		SKARN Fo, cpy, Au, gross gnt		Ni-Cu massive sulphide low Cr-diop, chromite, rutile, cpy, Fay, opx**	
										R	N	R	N	R	N
0001	0	0	0	0	0	0	0	0	1 spessartine	0	0	0	0	1	2
0002	0	0	0	0	0	0	3	0	2 spessartine	3	5	3	5	3	5
0003	0	0	0	0	0	0	2	0	3 spessartine	2	3	2	3	0	0
0004	0	0	0	0	0	0	1	0	-	1	1	1	1	0	0
0005	0	0	1	0	0	0	2	0	-	2	3	2	3	1	2
0006	0	0	0	0	0	0	2	9	-	12	18	3	4	9	13
0007	0	Tr	0	0	0	0	2	0	-	2	3	2	3	4	6
0008	0	0	3	0	6	0	0	0	-	9	9	0	0	11	11
0009	0	0	1	0	0	0	3	2	-	5	6	3	3	14	16
0010	0	0	0	0	0	0	0	4	*see table 5	6	7	0	0	9	10
0011	0	Tr	0	0	0	0	0	0	-	1	1	0	0	1	1
0012	0	0	0	0	0	0	0	0	-	1	1	0	0	12	15
0013	0	0	2	0	0	0	1	0	-	1	1	1	1	7	10
0014	0	Tr	1	0	0	0	0	0	-	0	0	0	0	5	5
0015	0	0	0	0	0	0	1	0	*see table 5	1	1	1	1	11	10
0016	0	0	1	0	0	0	2	0	-	2	2	2	2	2	2
0017	0	Tr	0	0	0	0	0	0	-	0	0	0	0	12	14
0018	0	0	1	0	0	0	0	0	-	0	0	0	0	6	10
0019	0	0	0	0	0	0	0	0	-	0	0	0	0	3	4
0020	0	0	0	0	0	0	1	0	-	1	1	1	1	2	3
0021	0	0	0	0	0	0	1	0	-	1	1	1	1	4	3
0022	0	0	0	0	0	0	0	0	-	0	0	0	0	0	0
0023	0	Tr	0	0	0	0	0	0	-	0	0	0	0	0	0
0024	0	0	0	0	0	0	0	0	-	0	0	0	0	2	4
0025	0	0	0	0	0	0	0	0	-	3	4	1	1	13	18
0026	0	0	0	0	0	0	0	0	-	1	2	0	0	12	20
0027	0	3	0	0	0	0	2	0	-	5	7	4	6	8	11
0031	0	0	1	0	1	0	0	0	-	2	3	1	2	4	7
0032	0	Tr	8	0	0	0	0	0	-	0	0	0	0	29	54
0033	0	Tr	0	0	2	0	0	0	-	2	4	0	0	3	5
0034	0	Tr	0	0	0	0	0	0	*see table 5	2	3	0	0	21	32
0035	0	5	0	0	0	0	0	0	-	0	0	0	0	9	10
0036	0	3	0	0	0	0	0	0	*see table 5	3	3	0	0	16	16

Sample Number	Table Feed	Chalcopyrite		Molybdenite	Pyrite	Spinels (raw data) # grains				Corundum		low Cr-Diopside		Ky	Sil	St	Sps
KAP-	(Kg)	# est. grains	Picked grains	Picked grains	%	Other Spinel	Hercynite	Gahnite MgO<2wt%	Gahnite MgO>2wt%	Ruby Corundum	sapphirine/ sapphire grains	Picked grains	Probed grains	%	%	%	%
					(# grains)	ODM	ODM	GL	GL			ODM	GL				
0037	11.6	0	0	0	0	1	0	0	1	0	0	7	7	Tr	Tr	Tr	0
0038	14.7	0	0	0	0	0	0	0	0	2	1	15	13	Tr	Tr	Tr	0
0039	9.4	0	0	0	Tr (1 gr)	0	0	0	0	1	0	6	5	Tr	Tr	Tr	0
0040	15	0	0	0	0	0	0	0	0	0	0	~ 20	9	Tr	0	Tr	0
0041	12.8	0	0	0	Tr (5 gr)	0	0	0	0	0	0	3	2	Tr	0	Tr	0
0042	14	0	0	0	0	0	0	0	0	0	0	5	5	0	0	Tr	0
0043	12	1	1	0	Tr (~10 gr)	0	0	0	0	0	0	10	9	Tr	0	Tr	0
0044	15.9	0	0	0	0	0	0	1	0	0	0	2	1	Tr	0	Tr	0
0045	14.3	0	0	0	Tr (~10 gr)	0	0	0	0	0	1	6	4	Tr	0	Tr	Tr
0046	11.6	0	0	0	0	0	0	0	0	0	0	2	2	Tr	0	Tr	Tr
0047	9.9	0	0	0	0	0	0	0	0	0	0	4	2	Tr	0	Tr	0
0048	16	0	0	0	0	1	0	0	0	1	0	30	24	Tr	0	Tr	0
0049	17.6	0	0	0	0	0	0	0	0	0	0	5	3	Tr	0	Tr	0
0050	17.4	0	0	0	0	0	0	0	0	2	0	5	3	Tr	0	0	0
0051	14	0	0	0	0	0	0	0	0	0	0	8	8	Tr	0	Tr	0
0052	13.5	0	0	0	0	0	0	0	0	0	0	0	0	Tr	0	Tr	0
0053	18.6	0	0	0	0	0	0	0	0	0	0	1	1	Tr	0	Tr	0
0054	18	0	0	0	0	0	0	0	0	1	1	7	5	Tr	0	0	0
0055	12	0	0	0	Tr (4 gr)	0	0	0	0	0	0	1	1	Tr	0	Tr	0
0056	18.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0057	13.6	0	0	0	0	0	0	0	0	0	0	1	0	Tr	Tr	Tr	0
0058	17.2	0	0	0	0	0	0	0	0	0	0	16	14	Tr	Tr	0	0
0059	14.3	~60	10	0	Tr (10 gr)	2	0	0	0	0	0	8	8	Tr	Tr	0.5	0.5
0060	9.2	0	0	0	0	0	0	0	0	0	0	2	2	Tr	Tr	3	0
0061	8.5	1	1	0	Tr (~5 gr)	0	0	0	0	0	0	13	10	0.5	Tr	0	0
0062	8.7	0	0	0	0	0	0	0	1	0	0	13	11	0	0	0	0
0063	8.2	0	0	0	Tr (2 gr)	0	0	0	0	0	0	1	12	Tr	0	Tr	Tr
0064	7.2	0	0	0	0.2 (~100 gr)	0	0	0	0	0	0	1	1	0	0	0	0
0065	10.5	0	0	0	0	5	0	0	0	9	0	15	11	Tr	0	Tr	0
0066	12.5	0	0	0	0	2	0	0	0	0	1	17	11	Tr	Tr	Tr	0
0067	13.4	0	0	0	0	0	0	0	0	0	1	4	4	Tr	0	0	0
0068	10.4	0	0	0	Tr (~10 gr)	0	0	0	0	0	0	2	1	Tr	0	0	0
0069	14.6	1	1	0	Tr (3 gr)	0	0	0	0	0	0	6	5	Tr	0	Tr	0

Sample Number	Fay	Opx	Chromite		Red Rutile	Fo	Native Gold	Mn Epidote	Others	Total MMSIMs					
KAP-	%	%	# MMSIM grains (raw data)	Est. # of grains	# grains	# grains	# picked grains	# picked grains	# grains	**VMS** corundum,gahnite, rutile,Mn-epidote, cpy, Au, Ky**,Sil**,St**,Opx**,Sps**		**SKARN** Fo, cpy, Au, gross gnt		**Ni-Cu massive sulphide** low Cr-diop, chromite, rutile, cpy, Fay, opx**	
										R	N	R	N	R	N
0037	0	3	1	0	2	0	0	0	1 gross gnt	3	4	1	1	10	13
0038	0	Tr	3	0	5	0	4	0	-	12	12	4	4	21	21
0039	0	0.5	1	0	0	0	0	1	-	2	3	0	0	6	10
0040	0	4	1	0	6	0	0	0	1 gross gnt	6	6	1	1	16	16
0041	0	3	0	0	0	0	0	0	-	0	0	0	0	2	2
0042	0	0.5	1	0	0	0	0	0	-	0	0	0	0	6	6
0043	0	Tr	0	0	1	0	0	0	*see table 5	2	3	1	1	11	14
0044	0	Tr	0	0	0	0	4	0	-	5	5	4	4	1	1
0045	0	2	0	0	0	0	0	0	-	1	1	0	0	4	4
0046	0	Tr	0	0	0	0	0	0	-	0	0	0	0	2	3
0047	0	Tr	0	0	0	0	0	0	1 gross gnt	0	0	1	2	2	3
0048	0	Tr	0	0	0	0	2	0	-	3	3	2	2	24	23
0049	0	0.5	0	0	1	0	0	0	-	1	1	0	0	4	3
0050	Tr	Tr	0	0	0	0	2	0	-	4	3	2	2	3	3
0051	0	Tr	1	0	0	0	0	0	-	0	0	0	0	9	10
0052	0	Tr	0	0	0	0	0	0	2 co,1 bo,3 ma	0	0	0	0	0	0
0053	0	0.5	0	0	0	0	1	0	-	1	1	1	1	1	1
0054	0	0	0	0	0	0	1	0	-	3	3	1	1	5	4
0055	0	0	0	0	0	0	0	0	-	0	0	0	0	1	1
0056	0	0	0	0	0	0	3	0	-	3	2	3	2	0	0
0057	0	Tr	0	0	0	0	0	0	-	0	0	0	0	0	0
0058	Tr	12	0	0	2	0	2	0	-	4	3	2	2	16	14
0059	0	3	0	0	1	0	0	3	-	14	15	10	10	19	20
0060	0	3	0	0	1	0	0	0	-	1	2	0	0	3	5
0061	Tr	2	1	0	0	0	0	0	-	1	2	1	2	12	21
0062	0	1	0	0	0	0	0	0	*see table 5	1	2	0	0	11	19
0063	Tr	1	0	0	2	0	1	0	-	3	5	1	2	14	26
0064	Tr	Tr	6	9	2	0	0	0	-	2	4	0	0	9	19
0065	0	Tr	1	0	1	0	0	0	-	10	14	0	0	13	19
0066	Tr	5	1	0	3	0	18	0	-	22	26	18	22	15	18
0067	0	5	0	0	1	0	2	0	-	4	4	2	2	5	6
0068	0	Tr	4	0	0	0	1	0	-	1	1	1	1	5	7
0069	0	Tr	0	0	0	0	0	0	-	1	1	1	1	6	6

Sample Number	Table Feed	Chalcopyrite		Molybdenite	Pyrite	Spinels (raw data) # grains				Corundum		low Cr-Diopside		Ky	Sil	St	Sps
KAP-	(Kg)	# est. grains	Picked grains	Picked grains	%	Other Spinel	Hercynite	Gahnite MgO<2wt%	Gahnite MgO>2wt%	Ruby Corundum	sapphirine/ sapphire grains	Picked grains	Probed grains	%	%	%	%
					(# grains)	ODM	ODM	GL	GL			ODM	GL				
0070	7.9	0	0	0	Tr (~10 gr)	1	0	0	0	0	3	11	7	Tr	Tr	0	0
0071	12.1	0	0	0	Tr (~5 gr)	0	3	0	0	0	4	7	5	Tr	0	0	0
0072	15.6	0	0	0	0	0	0	0	0	0	2	~ 30	9	Tr	0	Tr	0
0073	11.9	0	0	0	0	10	3	0	0	4	8	~ 50	12	Tr	0	Tr	0
0074	14.4	0	0	0	0	2	0	0	0	1	0	8	5	Tr	Tr	0	0
0075	15.5	0	0	0	0	3	3	0	1	0	5	7	6	Tr	Tr	0	0
0076	9.7	1	1	0	Tr (~15 gr)	1	0	0	0	0	0	5	5	Tr	0	0	0
0077	12.9	0	0	0	Tr (5 gr)	5	1	1	0	1	2	~ 35	17	Tr	Tr	0	0
0078	13.1	0	0	0	0	14	0	0	1	0	3	4	2	Tr	0	0	0
0079	15.4	1	1	0	Tr (2 gr)	2	0	1	0	1	1	5	5	0	0	0	0
0080	11.2	0	0	0	Tr (~5 gr)	7	0	0	0	0	0	4	4	Tr	0	0	0
0081	15.1	0	0	0	0	1	1	0	0	1	8	9	5	Tr	0	0	0
0082	13.9	0	0	0	Tr (2 gr)	6	1	0	0	1	4	16	13	Tr	0	0	0
0083	11.9	0	0	0	Tr (3 gr)	8	6	2	1	13	10	~ 40	13	Tr	0	0	0
0084	13.5	0	0	0	0	11	0	0	0	1	2	10	6	Tr	Tr	Tr	0
0085	15.3	0	0	0	0	3	0	0	2	4	1	13	10	Tr	0	Tr	0
0086	13.8	0	0	0	0	45	4	1	1	~ 25	~ 35	~ 50	14	Tr	0	Tr	0
0087	14.3	0	0	0	0	0	0	0	0	0	0	0	0	Tr	0	0	0
0088	14	0	0	0	0	3	0	0	0	0	0	0	0	Tr	0	0	0
0089	14.1	2	2	0	Tr (5 gr)	3	0	0	0	1	2	2	2	0	0	0	0
0090	11.3	0	0	0	Tr (1 gr)	4	0	0	1	1	0	5	4	Tr	0	0	0
0091	10.6	0	0	0	Tr (1 gr)	0	0	0	0	0	0	5	4	Tr	0	0	0
0092	11.9	0	0	0	0	3	0	0	0	2	1	8	7	Tr	0	0	Tr
0093	4.7	0	0	0	0	0	0	0	0	0	0	1	1	Tr	0	0	0
0094	16.4	0	0	0	0	0	0	0	0	0	0	0	0	Tr	0	0	0
0095	17	0	0	0	Tr (1 gr)	1	0	0	0	2	2	14	10	Tr	0	0	0
0096	14.35	1	1	0	Tr (~10 gr)	0	3	0	0	0	0	0	0	0	0	0	0
0097	13.2	0	0	0	0	40	1	0	0	16	~ 35	~ 75	12	Tr	0	0	0
0098	12.1	0	0	0	0	0	2	0	0	1	1	2	0	0	0	0	0
0099	13.2	0	0	0	0	0	0	0	0	0	1	2	2	0	0	0	0
0100	9.5	0	0	0	Tr (2 gr)	0	0	0	0	1	0	9	9	Tr	0	0	0
0101	12.5	0	0	0	0	2	0	0	0	2	0	14	12	Tr	0	0.5	0
0102	15.1	0	0	0	0	1	0	0	0	0	0		2	Tr	0	Tr	0

Sample Number	Fay	Opx	Chromite		Red Rutile	Fo	Native Gold	Mn Epidote	Others	Total MMSIMs					
KAP-	%	%	# MMSIM grains (raw data)	Est. # of grains	# grains	# grains	# picked grains	# picked grains	# grains	**VMS** corundum,gahnite, rutile,Mn-epidote, cpy, Au, Ky**,Sil**,St**,Opx**,Sps**		**SKARN** Fo, cpy, Au, gross gnt		**Ni-Cu massive sulphide** low Cr-diop, chromite, rutile, cpy, Fay, opx**	
										R	**N**	**R**	**N**	**R**	**N**
0070	0	1	2	0	6	0	0	0	-	9	17	0	0	15	28
0071	0	2	3	10	3	0	1	0	*see table 5	8	10	1	1	11	14
0072	0	4	0	0	0	0	0	0	-	2	2	0	0	9	9
0073	0	2	0	0	40	0	0	1	*see table 5	53	67	0	0	52	66
0074	0	10	2	0	1	1	1	1	-	4	4	2	2	8	8
0075	Tr	1	0	0	0	0	0	0	*see table 5	6	6	0	0	6	6
0076	0	1	0	0	6	0	0	0	-	7	11	1	2	12	19
0077	0	1	4	12	0	0	0	1	-	5	6	0	0	21	24
0078	0	Tr	0	0	0	0	0	0	-	4	5	0	0	2	2
0079	0	0.5	0	0	4	0	2	0	-	10	10	3	3	10	10
0080	0	0.5	0	0	0	0	0	0	-	0	0	0	0	4	5
0081	0	1	0	0	5	0	0	0	-	14	14	0	0	10	10
0082	0	1	0	0	6	0	0	0	-	11	12	0	0	19	21
0083	0	Tr	4	0	3	0	0	1	*see table 5	30	38	0	0	20	25
0084	0	Tr	0	0	9	0	0	0	-	12	13	0	0	15	17
0085	0	2	0	0	0	0	0	0	-	7	7	0	0	10	10
0086	0	1	1	0	100	0	0	0	-	162	176	0	0	115	125
0087	0	0	0	0	0	0	1	0	-	1	1	1	1	0	0
0088	0	0	0	0	0	0	2	0	-	2	2	2	2	0	0
0089	Tr	1	0	0	0	0	0	0	-	5	5	2	2	4	4
0090	0	1	0	0	0	0	1	0	-	3	4	1	1	4	5
0091	0	1	0	0	0	0	0	0	-	0	0	0	0	4	6
0092	Tr	Tr	0	0	0	0	0	0	-	3	4	0	0	7	9
0093	0	Tr	0	0	0	0	0	0	-	0	0	0	0	1	3
0094	0	5	0	0	0	0	2	0	-	2	2	2	2	0	0
0095	Tr	2	0	0	0	0	1	0	*see table 5	5	4	1	1	10	9
0096	Tr	Tr	0	0	0	0	0	0	-	1	1	1	1	1	1
0097	0	2	0	0	5	0	0	1	-	57	65	0	0	17	19
0098	0	7	0	0	0	0	1	0	*see table 5	3	4	1	1	0	0
0099	Tr	4	0	0	0	0	0	0	-	1	1	0	0	2	2
0100	0	5	3	5	0	0	0	0	-	1	2	0	0	12	19
0101	0	0.5	1	0	0	0	0	0	-	2	2	0	0	13	16
0102	0	Tr	1	0	1	0	0	0	*see table 5	1	1	0	0	4	4

Sample Number	Table Feed	Chalcopyrite		Molybdenite	Pyrite	Spinels (raw data) # grains				Corundum		low Cr-Diopside		Ky	Sil	St	Sps
KAP-	(Kg)	# est. grains	Picked grains	Picked grains	%	Other Spinel	Hercynite	Gahnite MgO<2wt%	Gahnite MgO>2wt%	Ruby Corundum	sapphirine/ sapphire grains	Picked grains	Probed grains	%	%	%	%
					(# grains)	ODM	ODM	GL	GL			ODM	GL				
0103	12.2	0	0	0	Tr (1 gr)	0	0	0	0	0	1	18	15	Tr	Tr	Tr	0
0104	18.3	0	0	0	Tr (3 gr)	1	0	0	0	1	0	15	11	Tr	Tr	Tr	0
0105	12.3	0	0	0	0	0	0	0	0	1	0	4	3	Tr	Tr	Tr	0
0106	16.1	1	1	0	Tr (2 gr)	0	0	0	0	0	0	2	2	Tr	0	Tr	0
0107	15.2	0	0	0	0	0	0	0	0	0	0	11	5	Tr	0	Tr	0
0118	10	0	0	1	Tr (4 gr)	0	0	0	0	0	0	4	3	Tr	0	Tr	0
0119	12.9	0	0	0	Tr (3 gr)	0	0	0	0	1	0	1	0	Tr	0	Tr	0
0120	16.7	0	0	0	Tr (~70 gr)	0	0	0	0	0	0	6	5	Tr	0	Tr	0
0121	9.7	1	1	0	Tr (3 gr)	0	0	0	0	0	0	3	2	Tr	0	Tr	0
0122	13.1	1	1	0	Tr (1 gr)	0	0	0	0	0	0	13	9	0	Tr	Tr	0
0123	9.1	0	0	0	0	0	0	0	0	0	0	1	1	Tr	0	Tr	0
0124	13.9	1	1	0	0	0	0	0	0	0	0	0	0	Tr	0	Tr	0
0125	7.8	0	0	0	0	0	0	0	0	0	1	0	0	Tr	0	Tr	0
0126	11.7	0	0	0	0	0	0	0	0	0	1	2	0	Tr	Tr	Tr	0
0127	6.9	0	0	0	Tr (1 gr)	0	0	0	0	2	0	7	5	Tr	0	0	0
0128	8.1	0	0	0	0	0	0	0	0	0	0	0	0	Tr	0	Tr	0
0129	6.4	0	0	0	0	0	0	0	0	0	0	3	3	Tr	0	Tr	0
0130	7.7	0	0	0	0	0	0	0	0	0	0	1	1	Tr	0	Tr	0
0131	8.7	0	0	0	0	0	0	0	0	0	0	0	0	Tr	0	0	0
0132	12.5	0	0	0	0	0	0	0	0	0	0	3	3	Tr	0	Tr	Tr
0133	9.3	0	0	0	Tr (1 gr)	0	0	0	0	0	0	6	5	Tr	0	Tr	0
0134	11.3	1	1	0	0	0	0	0	0	0	0	6	4	Tr	0	Tr	0
0135	10.6	2	2	0	Tr (3 gr)	0	0	0	0	1	0	2	1	Tr	0	Tr	Tr
0136	10.7	0	0	0	Tr (~15 gr)	0	0	0	0	0	1	3	2	Tr	0	Tr	0
0137	15.8	0	0	0	0	5	0	1	0	1	0	26	13	1	Tr	Tr	0
0138	8.8	0	0	0	Tr (~20 gr)	0	0	0	0	0	0	4	3	Tr	0	Tr	0
0139	6.4	0	0	0	0	0	0	0	0	0	0	4	2	0.5	0	Tr	0
0140	8	0	0	0	Tr (4 gr)	0	0	0	0	0	0	13	7	Tr	Tr	Tr	0
0141	8.1	0	0	0	0	0	0	0	0	0	0	3	2	Tr	0	0	0
0142	5.6	0	0	0	Tr (3 gr)	2	1	0	0	0	1	4	2	Tr	0	0	0
0143	12.1	0	0	0	0	3	0	0	0	1	4	19	14	Tr	Tr	Tr	0
0144	16.3	1	2	0	Tr (5 gr)	0	0	0	0	0	0	7	2	Tr	0	Tr	0
0145	15.2	0	0	0	Tr (1 gr)	0	0	0	0	2	0	6	4	Tr	0	Tr	0

Sample Number	Fay	Opx	Chromite		Red Rutile	Fo	Native Gold	Mn Epidote	Others	Total MMSIMs					
KAP-	%	%	# MMSIM grains (raw data)	Est. # of grains	# grains	# grains	# picked grains	# picked grains	# grains	**VMS** corundum,gahnite, rutile,Mn-epidote, cpy, Au, Ky**,Sil**,St**,Opx**,Sps**		**SKARN** Fo, cpy, Au, gross gnt		**Ni-Cu massive sulphide** low Cr-diop, chromite, rutile, cpy, Fay, opx**	
										R	N	R	N	R	N
0103	0	Tr	1	0	0	0	0	0	-	1	1	0	0	16	20
0104	0	Tr	2	0	1	0	0	0	-	2	2	0	0	14	11
0105	Tr	Tr	0	0	0	0	0	0	-	1	1	0	0	3	4
0106	0	Tr	0	0	0	0	0	0	-	1	1	1	1	3	3
0107	0	Tr	3	0	0	0	1	0	*see table 5	1	1	1	1	8	8
0118	0	Tr	0	0	0	0	0	0	-	0	0	0	0	3	5
0119	0	Tr	1	0	0	0	0	0	-	1	1	0	0	1	1
0120	0	Tr	0	0	0	0	0	0	-	0	0	0	0	5	4
0121	0	Tr	0	0	0	0	0	0	-	1	2	1	2	3	5
0122	0	1	0	0	0	0	0	0	-	1	1	1	1	10	11
0123	0	Tr	0	0	0	0	0	0	-	0	0	0	0	1	2
0124	0	1	0	0	0	0	1	0	-	2	2	2	2	1	1
0125	10	Tr	0	0	0	0	1	1	-	3	6	1	2	0	0
0126	10	Tr	2	0	0	0	4	0	-	5	6	4	5	2	3
0127	Tr	1	0	0	3	0	1	0	-	6	13	1	2	8	17
0128	2	2	0	0	1	0	0	0	-	1	2	0	0	1	2
0129	3	5	0	0	0	0	3	0	-	3	7	3	7	3	7
0130	3	5	0	0	0	0	0	0	-	0	0	0	0	1	2
0131	Tr	Tr	0	0	0	0	1	0	-	1	2	1	2	0	0
0132	Tr	Tr	0	0	0	0	1	0	-	1	1	1	1	3	4
0133	2	Tr	1	0	0	0	1	0	-	1	2	1	2	6	10
0134	3	2	3	6	0	0	2	0	-	3	4	3	4	8	11
0135	4	6	0	0	1	0	0	0	-	4	6	2	3	4	6
0136	Tr	Tr	0	0	1	0	1	0	*see table 5	3	4	1	1	3	4
0137	0	0.5	0	0	8	0	0	0	-	10	9	0	0	21	20
0138	0.5	3	0	0	1	0	0	0	-	1	2	0	0	4	7
0139	0	Tr	0	0	2	0	0	0	-	2	5	0	0	4	9
0140	0	Tr	0	0	14	0	1	0	-	15	28	1	2	21	39
0141	Tr	4	0	0	0	0	0	1	-	1	2	0	0	2	4
0142	Tr	1	3	0	20	0	2	0	-	23	62	2	5	25	67
0143	Tr	Tr	6	13	11	0	0	0	1 gross gnt	16	20	1	1	31	38
0144	2	3	0	0	0	0	1	0	-	3	3	3	3	4	4
0145	Tr	Tr	0	0	0	0	0	0	-	2	2	0	0	4	4

Sample Number	Table Feed	Chalcopyrite		Molybdenite	Pyrite	Spinels (raw data) # grains				Corundum		low Cr-Diopside		Ky	Sil	St	Sps
KAP-	(Kg)	# est. grains	Picked grains	Picked grains	%	Other Spinel	Hercynite	Gahnite MgO<2wt%	Gahnite MgO>2wt%	Ruby Corundum	sapphirine/ sapphire grains	Picked grains	Probed grains	%	%	%	%
					(# grains)	ODM	ODM	GL	GL			ODM	GL				
0146	8.8	0	0	0	0	3	0	0	0	2	0	8	6	Tr	Tr	Tr	0
0147	6.3	1	1	0	Tr (3 gr)	0	0	0	0	0	0	1	0	0	0	Tr	0
0148	9.5	~30	11	0	Tr (5 gr)	0	0	1	0	0	2	~ 25	12	Tr	Tr	Tr	0
0149	9.7	1	1	0	Tr (~5 gr)	0	0	0	0	0	0	0	0	Tr	0	Tr	Tr
0150	13.8	0	0	0	Tr (2 gr)	0	0	0	0	0	0	7	6	Tr	0	Tr	0
0151	15.8	0	0	0	Tr (1 gr)	0	0	0	0	1	0	3	3	Tr	0	Tr	0
0152	13	2	2	0	Tr (2 gr)	0	0	0	1	2	2	12	7	Tr	0	Tr	0
0153	10.9	0	0	0	Tr (~30 gr)	0	1	0	0	0	0	3	3	Tr	0	Tr	0
0154	18.7	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
0155	13.9	1	1	0	0	0	0	0	0	0	0	2	1	Tr	0	Tr	0
0156	5.1	1	3	0	1% (~300 gr)	0	0	0	0	0	0	0	3	0	Tr	0	0
0157	15.3	0	0	0	Tr (~20 gr)	0	0	0	0	0	0	0	0	Tr	Tr	Tr	0
0158	14.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0159	17.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0160	13.6	3	12	0	Tr (1 gr)	2	0	0	0	0	0	3	1	0	0	Tr	Tr
0161	8.9	0	0	1	0	0	0	0	0	0	0	3	3	0	0	0	Tr
0162	10.1	4	6	0	Tr (~10 gr)	0	1	0	0	0	0	0	0	0	0	0	Tr
0163	12.8	0	0	0	Tr (~10 gr)	0	0	0	0	0	0	1	1	0	Tr	0	Tr
0164	15.5	1	1	0	0	0	0	0	0	0	0	1	0	Tr	0	Tr	0
0165	13	0	0	0	0	9	2	0	0	5	2	13	8	Tr	Tr	Tr	Tr
0166	11.9	0	0	0	0	14	31	1	0	0	4	20	13	Tr	Tr	Tr	0
0167	14	0	0	0	Tr (2 gr)	11	1	0	0	2	8	17	15	Tr	Tr	Tr	0
0168	7.8	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0
0169	7.5	4	4	1	Tr (~50 gr)	0	0	0	0	1	0	14	16	0	0	Tr	0
0170	13.8	0	0	0	Tr (~5 gr)	0	0	0	0	0	0	2	2	Tr	0	0	0
0171	12.4	0	0	0	0	0	0	0	0	0	1	6	6	Tr	0	Tr	0
0172	15.1	0	0	0	Tr (1 gr)	1	0	0	0	0	0	1	1	Tr	0	Tr	0
0173	8.7	1	1	0	Tr (5 gr)	0	0	0	0	1	1	2	0	Tr	0	Tr	0
0174	10.3	0	0	0	Tr (3 gr)	1	0	0	0	0	1	3	2	Tr	Tr	Tr	0
0175	16.2	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
0176	11.2	0	0	0	0	0	0	0	0	0	0	1	2	0	0	0	0
0177	10.1	0	0	0	0	7	0	1	0	5	7	12	9	Tr	0	Tr	0

Sample Number	Fay	Opx	Chromite		Red Rutile	Fo	Native Gold	Mn Epidote	Others	Total MMSIMs					
KAP-	%	%	# MMSIM grains (raw data)	Est. # of grains	# grains	# grains	# picked grains	# picked grains	# grains	VMS corundum,gahnite, rutile,Mn-epidote, cpy, Au, Ky**,Sil**,St**,Opx**,Sps**		**SKARN** Fo, cpy, Au, gross gnt		**Ni-Cu massive sulphide** low Cr-diop, chromite, rutile, cpy, Fay, opx**	
										R	N	R	N	R	N
0146	Tr	7	0	0	19	0	3	0	-	24	41	3	5	25	43
0147	1	Tr	3	0	0	0	2	1	-	4	10	3	7	4	10
0148	Tr	7	11	25	30	0	9	1	-	54	85	20	32	64	101
0149	5	Tr	0	0	0	0	2	0	-	3	5	3	5	1	2
0150	3	1	1	0	18	0	1	0	-	19	21	1	1	25	27
0151	Tr	Tr	0	0	0	0	1	0	-	2	2	1	1	3	3
0152	3	Tr	2	0	19	0	0	0	-	26	30	2	2	30	35
0153	30	Tr	0	0	5	0	1	0	-	6	8	1	1	8	11
0154	0	0	0	0	0	0	3	0	-	3	2	3	2	1	1
0155	0.5	3	0	0	0	0	2	6	-	9	10	3	3	2	2
0156	2	Tr	29	45	0	1	0	0	*see table 5	3	9	4	12	35	103
0157	0	Tr	1	0	0	0	2	0	-	2	2	2	2	1	1
0158	0	Tr	0	0	0	0	4	0	-	4	4	4	4	0	0
0159	Tr	5	0	0	0	0	0	0	-	0	0	0	0	0	0
0160	0	2	8	0	0	0	2	0	-	14	15	14	15	21	23
0161	0	Tr	0	0	0	0	1	0	-	1	2	1	2	3	5
0162	0.5	Tr	6	0	0	2	1	0	-	7	10	9	13	12	18
0163	0	0.5	5	0	0	0	0	0	-	0	0	0	0	6	7
0164	0	3	0	0	0	0	2	0	-	3	3	3	3	1	1
0165	Tr	3	10	18	7	1	0	0	*see table 5	14	16	1	1	25	29
0166	0	1	4	0	4	0	0	3	*see table 5, 1gross gnt	12	15	1	1	21	26
0167	Tr	Tr	0	0	14	0	1	2	*see table 5	27	29	1	1	29	31
0168	0	1	10	17	0	0	0	0	-	0	0	0	0	11	21
0169	0	Tr	0	0	0	0	0	0	-	5	10	4	8	20	40
0170	0	2	1	0	0	0	0	0	-	0	0	0	0	3	3
0171	Tr	3	0	0	0	0	0	0	*see table 5	1	1	0	0	6	7
0172	0	2	0	0	1	0	0	2	-	3	3	0	0	2	2
0173	Tr	Tr	6	0	7	0	0	0	-	10	17	1	2	14	24
0174	Tr	1	0	0	2	0	0	0	-	3	4	0	0	4	6
0175	0	2	0	0	0	0	1	0	-	1	1	1	1	1	1
0176	0	0	0	0	0	0	0	0	-	0	0	0	0	2	3
0177	0	Tr	2	0	5	0	0	0	-	18	27	0	0	16	24

Sample Number	Table Feed	Chalcopyrite		Molybdenite	Pyrite	Spinels (raw data) # grains				Corundum		low Cr-Diopside		Ky	Sil	St	Sps
KAP-	(Kg)	# est. grains	Picked grains	Picked grains	%	Other Spinel	Hercynite	Gahnite MgO<2wt%	Gahnite MgO>2wt%	Ruby Corundum	sapphirine/ sapphire grains	Picked grains	Probed grains	%	%	%	%
					(# grains)	ODM	ODM	GL	GL			ODM	GL				
0178	10.3	0	0	0	0	1	1	0	0	0	0	2	1	0	Tr	Tr	0
0179	13.7	1	1	0	Tr (4 gr)	0	0	0	0	0	0	1	1	0	0	0	0
0180	7.7	0	0	0	0	0	0	0	0	0	1	0	0	Tr	0	Tr	0
0181	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0182	13.4	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
0183	14.3	0	0	0	0	0	0	0	0	0	0	0	0	Tr	0	0	0
0184	13	0	0	0	0	1	0	0	0	0	0	1	1	Tr	Tr	Tr	0
0185	16.5	0	0	0	0	1	0	0	0	0	0	1	0	Tr	Tr	0	0
0186	12	0	0	0	0	0	0	0	0	1	0	1	0	Tr	0	0	0
0187	12.3	0	0	0	2% (4 gr)	0	0	0	0	0	0	0	0	0	0	0	0
0188	13.7	0	0	0	0	2	0	0	0	0	13	4	4	Tr	0	Tr	0
0189	14.4	1	1	0	Tr (~30 gr)	5	0	0	0	1	0	11	8	0	0	Tr	0
0190	12.3	2	2	0	0	0	0	0	0	2	1	5	3	Tr	0	Tr	0
0191	9	0	0	0	0	3	0	0	0	1	5	9	4	Tr	0	Tr	0
0192	11.2	0	0	0	Tr (1 gr)	0	0	0	0	0	0	2	1	Tr	Tr	Tr	0
0193	11.5	1	1	0	Tr (5 gr)	0	0	0	0	0	0	0	0	0	0	0	0
0194	13.1	0	0	0	Tr (2 gr)	0	0	0	0	0	0	1	0	0	0	0	0
0195	13.4	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
0196	11.3	0	0	0	Tr (~60 gr)	2	0	0	0	0	0	8	7	Tr	0	Tr	0
0197	8.4	0	0	0	Tr (5 gr)	0	0	0	0	1	0	4	4	0	0	0	Tr
0198	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0199	9.6	0	0	0	0	0	0	0	0	0	0	0	0	Tr	0	Tr	0
0200	12.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0201	13.7	0	0	0	Tr (~100 gr)	2	0	0	0	0	0	1	1	Tr	0	Tr	0
0202	13	0	0	0	Tr (~5 gr)	0	0	0	0	0	0	0	0	0	0	0	0
0203	14.1	5	5	0	Tr (~50 gr)	1	0	0	0	1	0	9	8	Tr	0	Tr	Tr
0204	11.8	2	2	0	Tr (5 gr)	2	1	0	0	1	1	5	5	Tr	0	Tr	0
0205	13.4	3	3	0	Tr (~50 gr)	2	0	0	0	0	1	9	8	Tr	Tr	Tr	0
0206	15	0	0	0	Tr (3 gr)	2	0	0	0	0	2	6	3	Tr	0	Tr	0
0207	9.7	0	0	0	Tr (~20 gr)	0	0	0	0	2	2	4	5	0	0	0	Tr
0208	9.1	2	2	0	Tr (~100 gr)	1	0	0	0	0	0	2	0	0	0	0	Tr
0209	12	0	0	0	0	2	0	0	0	2	1	5	3	Tr	0	Tr	0
0210	12.5	0	0	0	Tr (~5 gr)	0	0	0	0	0	0	2	1	Tr	Tr	0	Tr

Sample Number	Fay	Opx	Chromite		Red Rutile	Fo	Native Gold	Mn Epidote	Others	Total MMSIMs					
KAP-	%	%	# MMSIM grains (raw data)	Est. # of grains	# grains	# grains	# picked grains	# picked grains	# grains	**VMS** corundum,gahnite, rutile,Mn-epidote, cpy, Au, Ky**,Sil**,St**,Opx**,Sps**)		**SKARN** Fo, cpy, Au, gross gnt		**Ni-Cu massive sulphide** low Cr-diop, chromite, rutile, cpy, Fay, opx**	
										R	**N**	**R**	**N**	**R**	**N**
0178	0	Tr	1	0	0	0	0	0	-	0	0	0	0	2	3
0179	0	Tr	0	0	0	0	0	0	*see table 5	1	1	1	1	2	2
0180	0	Tr	6	0	4	0	0	0	-	5	10	0	0	10	19
0181	0	Tr	0	0	0	0	0	0	-	0	0	0	0	0	0
0182	0	0.5	0	0	0	0	0	0	-	0	0	0	0	1	1
0183	0	Tr	0	0	0	0	1	0	-	1	1	1	1	0	0
0184	0	3	1	0	1	0	0	0	-	1	1	0	0	3	3
0185	0	2	0	0	0	0	3	0	-	3	3	3	3	0	0
0186	0	2	0	0	0	0	2	0	-	3	4	2	3	0	0
0187	0	Tr	0	0	0	0	1	0	-	1	1	1	1	0	0
0188	0	2	0	0	0	0	0	1	-	14	15	0	0	4	4
0189	0	3	0	0	3	9	5	1	-	11	11	15	16	12	13
0190	Tr	4	2	0	0	0	1	0	-	6	7	3	4	7	9
0191	0	Tr	0	0	0	0	0	0	-	6	10	0	0	4	7
0192	0	Tr	2	0	0	0	0	0	-	0	0	0	0	3	4
0193	0	0	0	0	0	0	1	0	-	2	3	2	3	1	1
0194	0	0	0	0	0	0	5	0	-	5	6	5	6	0	0
0195	0	Tr	0	0	0	0	0	0	-	0	0	0	0	1	1
0196	0	Tr	0	0	0	0	4	1	-	5	7	4	5	7	9
0197	0	Tr	0	0	0	0	0	0	-	1	2	0	0	4	7
0198	0	0	0	0	0	0	0	0	-	0	0	0	0	0	0
0199	0	3	0	0	0	0	1	0	-	1	2	1	2	0	0
0200	0	0	0	0	0	0	8	0	-	8	10	8	10	0	0
0201	0	2	2	0	0	0	0	0	-	0	0	0	0	3	3
0202	Tr	2	0	0	0	0	0	0	-	0	0	0	0	0	0
0203	0	1	0	0	0	0	0	1	*see table 5	7	7	5	5	13	14
0204	0	5	0	0	0	0	0	0	*see table 5	4	5	2	3	7	9
0205	0	8	0	0	0	0	0	0	-	4	4	3	3	11	12
0206	Tr	3	0	0	0	0	0	0	-	2	2	0	0	3	3
0207	0	5	3	0	1	0	0	0	1 gross gnt	5	8	1	2	9	14
0208	0	Tr	2	0	0	0	0	0	-	2	3	2	3	4	7
0209	0	Tr	5	0	2	0	1	0	-	6	8	1	1	10	13
0210	0	2	0	0	0	0	0	0	-	0	0	0	0	1	1

Sample Number	Table Feed	Chalcopyrite		Molybdenite	Pyrite	Spinels (raw data) # grains				Corundum		low Cr-Diopside		Ky	Sil	St	Sps
KAP-	(Kg)	# est. grains	Picked grains	Picked grains	%	Other Spinel	Hercynite	Gahnite MgO<2wt%	Gahnite MgO>2wt%	Ruby Corundum	sapphirine/ sapphire grains	Picked grains	Probed grains	%	%	%	%
					(# grains)	ODM	ODM	GL	GL			ODM	GL				
0211	12.7	0	0	0	0	5	1	0	0	0	4	5	4	Tr	0	Tr	0
0212	10.9	0	0	0	0	2	0	0	0	1	13	8	4	Tr	0	0	Tr
0213	8.7	1	1	0	Tr (~100 gr)	0	1	0	0	0	0	2	2	0	0	0	1
0214	12	0	0	0	0	9	1	0	0	0	7	3	2	Tr	0	0	0
0215	8	0	0	0	0	0	1	0	0	0	1	2	1	Tr	0	0	0
0216	10.3	0	0	0	Tr (2 gr)	0	0	0	0	0	0	1	1	0	0	Tr	0
0217	9.5	1	1	0	Tr (3 gr)	3	2	0	0	0	0	3	3	Tr	0	Tr	0
0218	10.2	0	0	0	0	0	0	0	0	0	0	5	1	Tr	0	Tr	0
0219	16.1	0	0	0	0	0	0	0	0	0	0	0	0	Tr	0	0	0
0220	10.2	0	0	0	Tr (5 gr)	1	0	0	0	1	0	1	0	Tr	Tr	Tr	0
0221	10.1	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	Tr
0222	16.3	0	0	0	0	1	0	0	0	0	0	5	1	Tr	0	Tr	0
0223	16.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0224	12.8	0	0	0	0	5	0	0	0	0	1	1	1	Tr	0	Tr	0
0225	15.2	0	0	0	0	3	1	0	0	0	1	3	2	Tr	0	Tr	0
0226	14.3	0	0	0	0	0	0	0	0	0	0	0	0	Tr	Tr	0	0
0227	11	1	1	0	Tr (~20 gr)	3	1	0	1	4	0	13	8	Tr	0	Tr	Tr
0228	11.7	11	11	0	2% (~600 gr)	0	0	0	0	0	0	0	0	Tr	Tr	0	Tr
0229	12.2	0	0	0	Tr (2 gr)	1	0	0	0	0	0	2	2	Tr	0	Tr	0
0230	10.1	0	0	0	0	17	1	0	0	0	17	4	3	Tr	0	0	0
0231	10.7	0	0	0	0	2	0	0	0	0	3	0	0	Tr	0	0	0
0232	10.3	2	3	1	0.2% (~100 gr)	9	0	0	0	4	0	9	8	Tr	Tr	Tr	0
0233	15.2	0	0	0	0	9	1	1	0	3	22	8	7	Tr	0	Tr	0
0234	12	1	1	0	Tr (1 gr)	3	2	0	0	1	4	5	5	Tr	0	Tr	0
0235	14.7	0	0	0	0	0	0	0	0	0	0	0	0	Tr	0	0	0
0236	12.2	0	0	0	0	0	1	0	0	0	2	2	2	0	0	0	0
0237	10.4	0	0	0	0	0	0	0	0	0	1	4	3	0	0	0	0
0238	13.6	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0
0239	11.4	0	0	0	0	0	0	0	0	0	0	0	0	Tr	0	0	0
0240	8.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0241	12.8	1	0	0	4% (~12 gr)	0	0	0	0	0	0	1	0	0	0	0	0
0242	13.7	0	0	0	0	0	0	0	0	0	0	0	0	Tr	0	0	0
0243	13.6	0	0	0	0	1	1	0	0	0	0	13	10	Tr	Tr	Tr	0

Sample Number	Fay	Opx	Chromite		Red Rutile	Fo	Native Gold	Mn Epidote	Others	Total MMSIMs					
KAP-	%	%	# MMSIM grains (raw data)	Est. # of grains	# grains	# grains	# picked grains	# picked grains	# grains	**VMS** corundum,gahnite, rutile,Mn-epidote, cpy, Au, Ky**,Sil**,St**,Opx**,Sps**		**SKARN** Fo, cpy, Au, gross gnt		**Ni-Cu massive sulphide** low Cr-diop, chromite, rutile, cpy, Fay, opx**	
										R	**N**	**R**	**N**	**R**	**N**
0211	0	3	0	0	1	0	0	0	-	5	6	0	0	5	6
0212	0	5	0	0	2	0	0	0	-	16	22	0	0	6	8
0213	Tr	1	0	0	0	0	0	0	-	1	2	1	2	3	5
0214	0	4	0	0	0	0	0	0	-	7	9	0	0	2	3
0215	Tr	1	0	0	0	0	0	0	-	1	2	0	0	1	2
0216	0	4	0	0	0	0	0	0	-	0	0	0	0	1	1
0217	0	1	6	0	7	0	0	0	-	8	13	1	2	17	27
0218	0	3	0	0	0	0	0	0	-	0	0	0	0	1	1
0219	0	4	0	0	0	0	0	0	-	0	0	0	0	0	0
0220	0	3	0	0	0	0	0	0	-	1	1	0	0	0	0
0221	0	2	0	0	2	0	0	0	-	2	3	0	0	2	3
0222	0	4	0	0	0	0	1	0	-	1	1	1	1	1	1
0223	0	Tr	0	0	0	0	2	0	-	2	2	2	2	0	0
0224	0	Tr	0	0	0	0	0	1	-	2	2	0	0	1	1
0225	Tr	5	0	0	0	6	5	0	-	6	6	11	11	2	2
0226	0	1	0	0	0	0	3	0	-	3	3	3	3	0	0
0227	0	1	0	0	0	0	3	1	*see table 5	10	14	4	5	9	12
0228	0	0	2	0	0	29	10	0	-	21	27	50	64	13	17
0229	0	0	0	0	0	0	0	0	-	0	0	0	0	2	2
0230	0	Tr	0	0	1	0	3	1	-	22	33	3	4	4	6
0231	0	Tr	1	0	0	0	0	0	-	3	4	0	0	1	1
0232	0	Tr	3	0	0	0	0	1	-	8	12	3	4	14	20
0233	0	Tr	0	0	0	0	0	0	*see table 5	26	26	0	0	7	7
0234	0	0	3	0	8	0	0	0	-	14	18	1	1	17	21
0235	0	Tr	0	0	0	0	0	0	-	0	0	0	0	0	0
0236	0	2	0	0	0	1	1	0	-	3	4	2	2	2	2
0237	0	1	0	0	0	0	0	0	-	1	1	0	0	3	4
0238	0	Tr	0	0	0	0	1	0	-	1	1	1	1	2	2
0239	0	Tr	0	0	0	0	4	0	-	4	5	4	5	0	0
0240	0	Tr	0	0	0	0	0	0	-	0	0	0	0	0	0
0241	0	Tr	0	0	0	1	0	0	-	0	0	1	1	0	0
0242	0	3	0	0	0	1	0	0	-	0	0	1	1	0	0
0243	0	1	0	0	5	4	1	0	-	6	7	5	6	15	17

Sample Number	Table Feed	Chalcopyrite		Molybdenite	Pyrite	Spinels (raw data) # grains				Corundum		low Cr-Diopside		Ky	Sil	St	Sps
KAP-	(Kg)	# est. grains	Picked grains	Picked grains	%	Other Spinel	Hercynite	Gahnite MgO<2wt%	Gahnite MgO>2wt%	Ruby Corundum	sapphirine/ sapphire grains	Picked grains	Probed grains	%	%	%	%
					(# grains)	ODM	ODM	GL	GL			ODM	GL				
0244	13.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0245	14.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0246	11.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0247	11.4	0	0	0	Tr (5 gr)	1	0	0	0	0	2	8	8	Tr	Tr	Tr	0
0248	12.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0249	7.4	1	1	0	Tr (~20 gr)	0	0	0	0	0	0	0	0	0	0	0	0
0250	10.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0252	11.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0253	11.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0254	9.9	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0255	10	0	0	0	0	1	0	0	0	1	0	1	1	0	0	Tr	Tr
0256	9.4	0	0	0	5 (~200 gr)	0	0	0	0	0	0	0	0	Tr	0	Tr	0
0257	12.6	0	0	0	0	0	0	0	0	0	0	4	2	Tr	0	Tr	0
0258	10.2	0	0	0	0	0	0	0	0	0	0	1	0	Tr	0	Tr	0
0259	13	0	0	0	0	0	0	0	0	0	0	1	0	Tr	Tr	Tr	0
0260	14.8	0	0	0	0	1	0	0	0	0	0	5	4	Tr	0	Tr	Tr
0261	12.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Tr	0
0262	13.6	0	0	0	1% (~300 gr)	0	0	0	0	0	0	0	0	0	0	0	0
0263	11.1	0	0	0	0.2% (~15 g)	0	0	0	0	0	0	2	1	0	0	0	0
0264	15.7	0	0	0	0	1	0	0	0	0	0	15	13	Tr	0	Tr	0
0265	17	0	0	0	Tr (1 gr)	1	0	1	0	3	1	10	7	Tr	0	Tr	0
0266	13.9	0	0	0	Tr (~40 gr)	0	0	0	0	0	0	5	3	Tr	0	Tr	0
0267	11.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0268	10.4	0	0	0	1% (~300 gr)	0	0	0	0	0	0	6	3	0	0	Tr	Tr
0269	9.6	0	0	0	0	0	0	0	0	0	0	~ 70	14	Tr	0	Tr	0
0270	11.7	1	0	0	Tr (10 gr)	1	0	0	0	0	0	8	4	0	0	Tr	0
0271	8.7	0	0	0	0	0	0	0	0	0	0	1	1	0	0	Tr	Tr
0272	14.6	0	0	0	0	0	0	0	0	0	0	10	4	Tr	0	Tr	Tr
0273	13	0	0	0	0.5% (~70 gr)	0	0	0	0	0	0	0	0	Tr	Tr	0	0
0274	10.5	0	0	0	0.5% (~70 gr)	0	0	0	0	0	0	7	5	Tr	0	Tr	Tr
0275	14.1	0	0	0	0	0	0	0	0	0	0	6	4	Tr	Tr	Tr	Tr
0276	17.3	0	0	0	0	1	0	0	0	0	0	14	3	Tr	0	Tr	Tr
0278	11.3	0	0	0	0	0	0	0	0	0	0	10	3	Tr	0	Tr	Tr

Sample Number	Fay	Opx	Chromite		Red Rutile	Fo	Native Gold	Mn Epidote	Others	Total MMSIMs					
KAP-	%	%	# MMSIM grains (raw data)	Est. # of grains	# grains	# grains	# picked grains	# picked grains	# grains	**VMS** corundum,gahnite, rutile,Mn-epidote, cpy, Au, Ky**,Sil**,St**,Opx**,Sps**		**SKARN** Fo, cpy, Au, gross gnt		**Ni-Cu massive sulphide** low Cr-diop, chromite, rutile, cpy, Fay, opx**	
										R	**N**	**R**	**N**	**R**	**N**
0244	0	Tr	0	0	0	0	0	0	-	0	0	0	0	0	0
0245	0	0	0	0	0	0	1	0	-	1	1	1	1	0	0
0246	0	5	0	0	0	0	0	0	-	0	0	0	0	0	0
0247	0	1	1	0	0	0	0	0	-	2	3	0	0	9	12
0248	0	Tr	0	0	0	0	0	0	-	0	0	0	0	0	0
0249	0	Tr	13	22	0	0	0	0	-	1	2	1	2	14	28
0250	0	7	0	0	0	0	1	0	-	1	1	1	1	0	0
0252	0	5	0	0	0	0	0	0	-	0	0	0	0	0	0
0253	0	1	0	0	0	0	3	0	-	3	4	3	4	0	0
0254	0	3	0	0	0	0	0	0	-	0	0	0	0	0	0
0255	0	1	1	0	0	0	0	0	-	1	2	0	0	2	3
0256	10	Tr	0	0	0	0	0	0	-	0	0	0	0	0	0
0257	0	8	0	0	0	1	2	0	-	2	2	3	4	2	2
0258	0	7	0	0	0	0	0	0	-	0	0	0	0	0	0
0259	0	2	0	0	0	0	0	0	-	0	0	0	0	0	0
0260	0	3	1	0	0	0	2	0	-	2	2	2	2	5	5
0261	0	0	0	0	0	0	0	0	-	0	0	0	0	0	0
0262	0	Tr	0	0	0	1	0	0	-	0	0	1	1	0	0
0263	0	2	0	0	0	0	0	0	-	0	0	0	0	1	1
0264	0	2	0	0	0	0	0	1	-	1	1	0	0	13	12
0265	0	1	0	0	0	0	0	0	-	5	4	0	0	7	6
0266	0	3	0	0	0	0	0	0	-	0	0	0	0	3	3
0267	0	5	0	0	0	0	0	0	-	0	0	0	0	0	0
0268	0	1	0	0	0	0	0	0	-	0	0	0	0	3	4
0269	0	2	0	0	0	0	0	0	-	0	0	0	0	14	22
0270	0	Tr	0	0	0	0	0	0	-	0	0	0	0	4	5
0271	0	Tr	0	0	0	0	0	0	-	0	0	0	0	1	2
0272	0	Tr	0	0	0	0	0	0	-	0	0	0	0	4	4
0273	0	Tr	0	0	0	0	0	0	-	0	0	0	0	0	0
0274	0	Tr	0	0	0	0	0	0	-	0	0	0	0	5	7
0275	0	0.5	0	0	1	0	0	0	-	1	1	0	0	5	5
0276	0	Tr	0	0	0	0	0	0	-	0	0	0	0	3	3
0278	Tr	1	0	0	0	0	0	0	-	0	0	0	0	3	4

Sample Number	Table Feed	Chalcopyrite		Molybdenite	Pyrite	Spinels (raw data) # grains				Corundum		low Cr-Diopside		Ky	Sil	St	Sps
KAP-	(Kg)	# est. grains	Picked grains	Picked grains	%	Other Spinel	Hercynite	Gahnite MgO<2wt%	Gahnite MgO>2wt%	Ruby Corundum	sapphirine/ sapphire grains	Picked grains	Probed grains	%	%	%	%
					(# grains)	ODM	ODM	GL	GL			ODM	GL				
0301	11.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0302	11.9	0	0	0	Tr (3 gr)	1	0	1	0	0	0	5	2	Tr	0	Tr	0
0303	9.5	0	0	0	Tr (2 gr)	2	0	0	0	0	0	1	1	0	0	0	0
0304	8.8	0	0	0	Tr (1 gr)	0	0	0	0	0	0	0	0	Tr	0	0	Tr
0305	17.1	0	0	0	5% (~2500 gr)	0	0	0	0	0	0	2	1	0	0	Tr	Tr
0306	13.1	5	5	0	Tr (~15 gr)	0	0	0	0	0	0	2	1	0	0	0	0
0307	12.8	0	0	0	Tr (~150 gr)	1	0	0	0	2	0	3	2	0	0	Tr	Tr
0308	13.8	2	2	0	Tr (~100 gr)	0	0	0	0	1	0	3	2	Tr	0	Tr	Tr
0309	10.7	0	0	0	0	3	0	0	0	0	0	1	0	Tr	0	Tr	Tr
0310	16.3	0	0	0	Tr (~50 gr)	3	0	0	0	1	0	3	2	0	0	0	0
0311	8.4	2	2	0	Tr (~50 gr)	0	0	0	0	2	0	2	2	0	0	0	Tr
0313	10.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Tr	0
0314	13	0	0	0	Tr (1 gr)	0	0	0	0	0	0	3	3	Tr	Tr	Tr	0
0315	12.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0316	9.3	0	0	0	Tr (~!0 gr)	13	0	0	0	2	5	12	8	Tr	Tr	Tr	0
0317	12.6	1	1	0	Tr (2 gr)	0	0	0	0	0	0	0	0	Tr	Tr	Tr	Tr
0318	14.8	0	0	0	0	2	0	0	0	0	0	3	1	Tr	0	Tr	0
0319	10.2	0	0	0	Tr (5 gr)	2	0	0	0	4	2	23	14	Tr	0	Tr	0
0320	11.5	0	0	0	0	0	0	0	0	0	0	5	3	Tr	0	Tr	0
0321	10.4	0	0	0	0	0	0	0	0	1	0	2	3	Tr	0	Tr	Tr
0322	7.7	1	1	0	0.5% (~150 gr)	0	0	0	0	0	0	0	0	Tr	0	Tr	0
0323	11.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	0
0324	11.3	0	0	0	0	1	0	0	0	1	0	2	3	Tr	0	0	0
0325	13.9	0	0	0	0	0	0	0	0	0	0	0	0	0	Tr	Tr	0
0326	12.7	2	2	0	Tr (~15 gr)	2	0	0	0	0	3	12	10	Tr	Tr	Tr	0
0327	8.2	0	0	0	Tr (3 gr)	0	0	0	1	2	0	7	7	Tr	0	Tr	0
0328	16.3	0	0	0	0	0	0	0	0	0	1	9	6	Tr	0	Tr	0
0329	10	0	0	0	0	1	0	0	0	1	0	3	0	Tr	0	Tr	Tr
0330	13.1	0	0	0	0	0	0	0	0	1	0	3	3	Tr	0	0	0
0331	14.55	0	0	0	0	0	0	0	0	0	0	1	0	Tr	0	Tr	0
0332	10.1	1	1	0	Tr (~10 gr)	0	0	0	0	0	0	18	8	Tr	Tr	Tr	0
0333	9.5	0	0	0	Tr (5 gr)	0	0	0	0	1	0	10	9	Tr	Tr	Tr	0
0334	15.3	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0

Sample Number	Fay	Opx	Chromite		Red Rutile	Fo	Native Gold	Mn Epidote	Others	Total MMSIMs					
KAP-	%	%	# MMSIM grains (raw data)	Est. # of grains	# grains	# grains	# picked grains	# picked grains	# grains	VMS corundum,gahnite, rutile,Mn-epidote, cpy, Au, Ky**,Sil**,St**,Opx**,Sps**		SKARN Fo, cpy, Au, gross gnt		Ni-Cu massive sulphide low Cr-diop, chromite, rutile, cpy, Fay, opx**	
										R	N	R	N	R	N
0301	0	Tr	0	0	0	0	0	0	-	0	0	0	0	0	0
0302	0	1	0	0	0	0	0	0	-	1	1	0	0	2	3
0303	0	Tr	20	0	0	0	0	0	-	0	0	0	0	21	33
0304	0	Tr	5	0	0	0	0	0	-	0	0	0	0	5	9
0305	0	2	1	0	0	0	2	0	-	2	2	2	2	2	2
0306	Tr	Tr	0	0	0	0	2	0	-	7	8	7	8	6	7
0307	0	Tr	3	0	0	0	0	0	-	2	2	0	0	5	6
0308	Tr	2	12	28	2	0	19	0	-	24	26	21	23	18	20
0309	0	Tr	3	0	0	0	0	0	-	0	0	0	0	3	4
0310	0	0	0	0	0	0	1	0	-	2	2	1	1	2	2
0311	0	Tr	0	0	0	5	4	0	-	8	14	11	20	4	7
0313	0	5	0	0	0	0	0	0	-	0	0	0	0	0	0
0314	0	4	0	0	0	0	0	1	*see table 5	1	1	0	0	3	3
0315	0	5	0	0	0	0	1	0	-	1	1	1	1	0	0
0316	0	1	3	12	0	3	0	2	-	9	15	3	5	11	18
0317	0	5	1	0	0	0	3	0	-	4	5	4	5	2	2
0318	0	2	1	0	0	0	0	0	-	0	0	0	0	2	2
0319	0	3	1	0	0	0	0	1	*see table 5	7	10	0	0	15	22
0320	0	1	7	15	0	0	1	0	-	1	1	1	1	10	13
0321	0	1	1	0	0	0	0	0	-	1	1	0	0	4	6
0322	Tr	4	0	0	0	0	0	0	-	1	2	1	2	1	2
0323	0	0.5	0	0	0	0	0	0	-	0	0	0	0	0	0
0324	0	4	0	0	0	0	1	0	*see table 5	2	3	1	1	3	4
0325	0	5	0	0	0	0	9	0	-	9	10	9	10	0	0
0326	0	Tr	0	0	0	0	0	0	-	5	6	2	2	12	14
0327	0	5	6	21	0	0	0	0	-	3	5	0	0	13	24
0328	0	2	1	0	0	0	0	0	-	1	1	0	0	7	6
0329	0	5	0	0	0	0	5	0	-	6	9	5	8	0	0
0330	Tr	2	0	0	0	0	0	0	-	1	1	0	0	3	3
0331	0	1	1	0	0	0	0	1	-	1	1	0	0	1	1
0332	0	Tr	0	0	0	0	0	0	-	1	1	1	1	9	13
0333	0	Tr	0	0	0	0	1	0	-	2	3	1	2	9	14
0334	0	5	0	0	0	0	0	0	-	0	0	0	0	0	0

Sample Number	Table Feed	Chalcopyrite		Molybdenite	Pyrite	Spinels (raw data) # grains				Corundum		low Cr-Diopside		Ky	Sil	St	Sps
KAP-	(Kg)	# est. grains	Picked grains	Picked grains	%	Other Spinel	Hercynite	Gahnite MgO<2wt%	Gahnite MgO>2wt%	Ruby Corundum	sapphirine/ sapphire grains	Picked grains	Probed grains	%	%	%	%
					(# grains)	ODM	ODM	GL	GL			ODM	GL				
0335	8.5	0	0	0	Tr (2 gr)	1	0	0	0	0	0	18	9	Tr	0	Tr	Tr
0336	7.7	0	0	0	Tr (~20 gr)	0	0	0	0	1	0	4	2	Tr	Tr	Tr	0
0337	14	0	0	0	Tr (6 gr)	0	0	0	0	2	2	38	24	Tr	0	Tr	0
0338	8.5	15	18	0	3% (~1000 gr)	0	0	0	0	0	1	10	10	Tr	0	Tr	0
0340	13.1	0	0	0	Tr (5 gr)	0	0	0	0	0	0	9	8	Tr	0	Tr	Tr
0434	13.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Tr	Tr
0435	12.9	0	0	0	Tr (2 gr)	0	0	0	0	0	0	2	1	Tr	0	Tr	0
0436	11.8	0	0	0	0	0	0	0	0	0	0	18	21	Tr	Tr	1	0
0437	8.7	0	0	0	Tr (~10 gr)	0	0	0	0	0	0	8	6	Tr	0	Tr	0
0438	8.1	0	0	0	0	0	0	0	0	0	0	13	11	Tr	Tr	Tr	0
0439	12.9	0	0	0	0	4	0	0	0	0	7	~ 60	16	0.5	0	2	0
0440	12.7	0	0	0	0	0	0	0	0	0	0	5	3	Tr	0	Tr	0
0441	17	0	0	0	0	1	0	0	0	0	0	0	0	0	0	Tr	0
0442	15.9	0	0	0	0	3	0	0	0	4	0	17	12	Tr	0	Tr	Tr
0443	12.7	0	0	0	0	0	0	0	0	0	0	4	4	0	0	Tr	0
0444	12.8	0	0	0	0	1	0	0	0	0	0	20	12	0.5	0	Tr	0
0445	13.9	0	0	0	Tr (~20 gr)	0	0	0	0	0	0	3	1	Tr	0	Tr	0
0446	16.9	0	0	0	0	1	0	0	0	0	0	50	37	Tr	Tr	Tr	0
0447	17.5	0	0	0	0	1	0	0	0	0	0	4	5	Tr	0	Tr	0
0448	20.5	0	0	0	0	0	0	0	0	0	0	10	8	Tr	0	Tr	0
0449	16.5	0	0	0	0	1	0	0	0	0	0	8	6	Tr	0	Tr	0
0450	15.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Tr	0
0475	11.8	0	0	0	0	0	0	0	0	0	0	1	0	Tr	0	Tr	0
0476	13.3	0	0	0	Tr (1 gr)	0	0	0	0	0	0	3	3	0	Tr	Tr	0
0477	12.4	0	0	0	Tr (4 gr)	0	0	0	0	0	0	~ 100	21	Tr	0	Tr	Tr
0478	16.2	0	0	0	0	0	0	0	0	0	0	7	6	0	0	Tr	0
0479	13.8	1	1	0	0	1	0	0	0	3	0	24	23	Tr	Tr	Tr	0
0480	11.7	0	0	0	0	3	0	0	0	4	2	19	12	Tr	Tr	Tr	Tr
0481	11.9	0	0	0	0	1	0	0	0	1	1	12	9	Tr	0	Tr	Tr
0482	19.3	0	0	0	0	1	0	0	0	1	5	38	26	Tr	Tr	Tr	0
0483	12	0	0	0	Tr (6 gr)	0	0	0	0	1	0	16	17	Tr	0	Tr	Tr
0484	16.9	0	0	0	0	0	0	0	0	2	3	48	36	Tr	0	Tr	Tr
0485	18.8	0	0	0	0	1	0	0	0	0	1	1	0	Tr	0	Tr	0

Sample Number	Fay	Opx	Chromite		Red Rutile	Fo	Native Gold	Mn Epidote	Others	Total MMSIMs					
KAP-	%	%	# MMSIM grains (raw data)	Est. # of grains	# grains	# grains	# picked grains	# picked grains	# grains	**VMS** corundum,gahnite, rutile,Mn-epidote, cpy, Au, Ky**,Sil**,St**,Opx**,Sps**		**SKARN** Fo, cpy, Au, gross gnt		**Ni-Cu massive sulphide** low Cr-diop, chromite, rutile, cpy, Fay, opx**	
										R	**N**	**R**	**N**	**R**	**N**
0335	0	Tr	0	0	0	0	0	0	-	0	0	0	0	9	16
0336	0	2	0	0	1	0	0	0	-	2	4	0	0	3	6
0337	0	1	0	0	0	0	0	0	-	4	4	0	0	24	26
0338	0	Tr	2	0	0	0	0	0	-	19	34	18	32	30	53
0340	0	Tr	1	0	0	0	0	0	-	0	0	0	0	9	10
0434	0	5	0	0	0	0	0	0	-	0	0	0	0	0	0
0435	0	3	0	0	0	0	0	0	-	0	0	0	0	1	1
0436	0	Tr	0	0	0	0	0	0	-	0	0	0	0	21	27
0437	0	Tr	0	0	0	0	0	0	-	0	0	0	0	6	10
0438	0	2	0	0	0	0	0	0	-	0	0	0	0	11	20
0439	0	Tr	0	0	2	0	1	0	-	10	12	1	1	18	21
0440	0	Tr	0	0	0	0	0	0	-	0	0	0	0	3	4
0441	0	Tr	0	0	0	0	0	0	-	0	0	0	0	0	0
0442	0	Tr	0	0	0	0	0	0	-	4	4	0	0	12	11
0443	0	1	0	0	0	0	0	0	-	0	0	0	0	4	5
0444	0	1	0	0	2	0	0	0	-	2	2	0	0	14	16
0445	0	Tr	0	0	0	0	0	0	-	0	0	0	0	1	1
0446	0	Tr	0	0	0	0	0	1	-	1	1	0	0	37	33
0447	0	Tr	4	0	0	0	0	0	1 gross gnt	0	0	1	1	9	8
0448	0	Tr	0	0	0	0	0	0	-	0	0	0	0	8	6
0449	0	Tr	0	0	0	0	0	0	-	0	0	0	0	6	5
0450	0	3	0	0	0	0	0	0	*see table 5	0	0	0	0	0	0
0475	0	Tr	0	0	0	0	0	0	-	0	0	0	0	0	0
0476	0	Tr	0	0	0	0	0	0	-	0	0	0	0	3	3
0477	0	3	1	0	0	0	0	0	-	0	0	0	0	22	27
0478	0	Tr	0	0	0	0	0	0	-	0	0	0	0	6	6
0479	0	2	0	0	0	0	0	0	*see table 5	4	4	1	1	24	26
0480	0	Tr	2	5	7	0	0	0	*see table 5	13	17	0	0	21	27
0481	0	Tr	0	0	0	0	0	1	-	3	4	0	0	9	11
0482	0	10	0	0	0	0	0	0	-	6	5	0	0	26	20
0483	0	Tr	5	20	0	0	0	0	-	1	1	0	0	22	28
0484	0	1	0	0	0	0	0	0	*see table 5	5	4	0	0	36	32
0485	0	5	0	0	0	0	0	0	-	1	1	0	0	0	0

Sample Number	Table Feed	Chalcopyrite		Molybdenite	Pyrite	Spinels (raw data) # grains				Corundum		low Cr-Diopside		Ky	Sil	St	Sps
KAP-	(Kg)	# est. grains	Picked grains	Picked grains	%	Other Spinel	Hercynite	Gahnite MgO<2wt%	Gahnite MgO>2wt%	Ruby Corundum	sapphirine/ sapphire grains	Picked grains	Probed grains	%	%	%	%
					(# grains)	ODM	ODM	GL	GL			ODM	GL				
0486	15	1	1	0	Tr (1 gr)	1	0	0	0	0	0	7	6	Tr	Tr	Tr	Tr
0487	12.5	2	2	0	0	4	0	0	0	0	1	28	24	Tr	Tr	Tr	Tr
0488	17.4	0	0	0	0	2	0	0	0	1	4	13	11	0	0	1	0
0489	19.2	0	0	0	0	0	0	0	0	0	0	1	0	Tr	0	Tr	0
0490	15.5	1	1	0	Tr (~15 gr)	11	0	0	0	9	2	~ 35	15	0	0	1	0
0491	21.5	0	0	0	0	0	0	0	0	2	3	9	7	Tr	0	1	0
0492	12	0	0	0	0	1	0	0	0	0	1	9	5	Tr	0	Tr	0
0493	17.3	0	0	0	0	1	0	0	0	0	0	21	14	Tr	0	Tr	0
0494	16	0	0	0	0	0	0	0	0	0	0	1	1	Tr	0	Tr	0
0495	16.9	0	0	0	0	1	0	0	0	0	0	10	9	Tr	0	0	0
0496	15.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0497	15.8	0	0	0	0	0	0	0	0	0	0	4	2	Tr	0	Tr	0
0498	17	0	0	0	0	0	0	0	0	0	0	0	0	Tr	0	Tr	0
0499	15.8	0	0	0	0	0	0	0	0	0	0	2	2	Tr	0	Tr	0
0500	16.7	0	0	0	0	0	0	0	0	0	0	3	3	0	0	Tr	0
0514	11	0	0	0	Tr (10 gr)	0	0	0	0	0	0	4	4	Tr	0	Tr	0
0515	12.5	0	0	0	0	0	0	0	0	0	0	5	3	Tr	0	Tr	0
0524	13	0	0	0	0	0	0	0	0	2	3	9	9	0	Tr	0	0
0525	15	1	1	0	0	0	0	0	0	0	0	0	0	Tr	0	Tr	0
0526	8.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0527	6.8	0	0	0	Tr (6 gr)	2	0	0	0	1	0	15	11	Tr	0	Tr	0
0528	12.9	0	0	0	Tr (1 gr)	0	0	0	0	0	0	9	6	Tr	0	Tr	0
0529	18.9	0	0	0	0	0	0	0	0	2	0	~ 60	22	Tr	0	Tr	0
0530	18.9	0	0	0	Tr (1 gr)	2	0	0	0	0	0	10	3	Tr	0	Tr	0
0531	17.3	0	0	0	Tr (2 gr)	0	0	0	0	0	0	17	6	Tr	0	Tr	0
0532	16.1	0	0	0	0	0	0	0	0	0	0	4	2	Tr	Tr	2	0
0535	17.4	0	0	0	0	4	0	0	0	0	0	15	13	Tr	0	Tr	0
0536	16	3	3	0	1% (~250 gr)	2	0	0	0	0	0	~ 50	15	Tr	Tr	Tr	0
0537	15.2	0	0	0	0	0	0	0	0	0	0	5	3	0	0	0.5	0
0538	20.3	0	0	0	0	0	0	0	0	0	0	3	3	0	0	Tr	0
0539	18.4	0	0	0	0	0	0	0	0	0	0	4	4	0	0	Tr	0
0540	18.1	0	0	0	0	2	0	0	0	1	0	16	15	0	0	Tr	0
0541	12.1	11	11	0	Tr (5 gr)	0	1	0	0	1	2	~ 35	10	Tr	0	Tr	0

Sample Number	Fay	Opx	Chromite		Red Rutile	Fo	Native Gold	Mn Epidote	Others	Total MMSIMs					
KAP-	%	%	# MMSIM grains (raw data)	Est. # of grains	# grains	# grains	# picked grains	# picked grains	# grains	VMS corundum,gahnite, rutile,Mn-epidote, cpy, Au, Ky**,Sil**,St**,Opx**,Sps**		SKARN Fo, cpy, Au, gross gnt		Ni-Cu massive sulphide low Cr-diop, chromite, rutile, cpy, Fay, opx**	
										R	N	R	N	R	N
0486	0	Tr	0	0	0	0	0	0	-	1	1	1	1	7	7
0487	0	Tr	15	150	9	0	0	0	*see table 5	12	14	2	2	50	60
0488	0	3	0	0	5	0	0	0	-	10	9	0	0	16	14
0489	0	15	0	0	0	0	0	0	-	0	0	0	0	0	0
0490	0	1	0	0	0	0	0	0	-	12	12	1	1	16	15
0491	0	15	1	0	2	0	0	0	-	7	5	0	0	10	7
0492	0	3	1	0	0	0	0	0	-	1	1	0	0	6	8
0493	0	4	0	0	9	0	0	0	-	9	8	0	0	23	20
0494	0	2	0	0	0	0	0	0	-	0	0	0	0	1	1
0495	0	20	0	0	1	0	0	1	*see table 5	2	2	0	0	10	9
0496	0	1	0	0	0	0	0	0	-	0	0	0	0	0	0
0497	0	2	0	0	0	0	0	0	-	0	0	0	0	2	2
0498	0	Tr	0	0	0	0	1	0	-	1	1	1	1	0	0
0499	0	Tr	0	0	0	0	0	0	-	0	0	0	0	2	2
0500	0	Tr	0	0	0	0	0	0	-	0	0	0	0	3	3
0514	0	Tr	0	0	0	0	0	0	-	0	0	0	0	4	5
0515	0	Tr	0	0	0	0	0	0	-	0	0	0	0	3	4
0524	0	0.5	0	0	0	1	0	0	-	5	6	1	1	9	10
0525	0	10	0	0	0	0	0	0	-	1	1	1	1	1	1
0526	0	Tr	0	0	0	0	0	0	-	0	0	0	0	0	0
0527	0	Tr	2	0	4	0	0	0	-	5	11	0	0	17	38
0528	0	2	0	0	0	0	0	0	-	0	0	0	0	6	7
0529	0	2	0	0	0	0	0	1	-	3	2	0	0	22	17
0530	0	2	0	0	0	0	0	1	-	1	1	0	0	3	2
0531	0	Tr	0	0	0	0	0	0	-	0	0	0	0	6	5
0532	0	1	0	0	0	0	1	0	-	1	1	1	1	2	2
0535	0	Tr	0	0	0	0	1	0	-	1	1	1	1	13	11
0536	0	2	3	0	0	0	0	0	-	3	3	3	3	21	20
0537	0	5	0	0	0	0	0	0	-	0	0	0	0	3	3
0538	0	1	0	0	0	0	0	0	-	0	0	0	0	3	2
0539	0	1	0	0	0	0	1	0	-	1	1	1	1	4	3
0540	0	5	0	0	0	0	0	1	-	2	2	0	0	15	12
0541	0	Tr	0	0	0	0	0	0	*see table 5	14	17	11	14	21	26

Sample Number	Table Feed	Chalcopyrite		Molybdenite	Pyrite	Spinels (raw data) # grains				Corundum		low Cr-Diopside		Ky	Sil	St	Sps
KAP-	(Kg)	# est. grains	Picked grains	Picked grains	%	Other Spinel	Hercynite	Gahnite MgO<2wt%	Gahnite MgO>2wt%	Ruby Corundum	sapphirine/ sapphire grains	Picked grains	Probed grains	%	%	%	%
					(# grains)	ODM	ODM	GL	GL			ODM	GL				
0542	16.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0543	19.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0544	14.4	0	0	0	Tr (1 gr)	0	0	0	0	0	0	0	0	Tr	0	Tr	0
0545	15.9	0	0	0	0	0	0	0	0	0	1	0	0	Tr	0	Tr	0
0546	19.3	0	0	0	0	0	0	0	0	0	1	3	2	Tr	0	1	Tr
0547	17.1	0	0	0	0	0	0	0	0	0	0	6	6	Tr	0	Tr	0
0548	17.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Tr	0
0549	16.9	0	0	0	Tr (3 gr)	1	0	0	0	0	0	7	6	Tr	0	Tr	0
0550	16.8	0	0	0	Tr (5 gr)	1	0	0	0	3	0	28	24	Tr	Tr	Tr	0
0551	15.5	1	1	0	0	0	0	0	0	0	0	~ 40	17	Tr	Tr	Tr	0
0552	17	0	0	0	0	0	0	0	0	0	0	10	7	Tr	0	Tr	0
0553	16	0	0	0	0	0	0	0	0	0	0	4	2	Tr	0	Tr	0
0554	17.2	0	0	0	0	0	0	0	0	0	0	10	7	Tr	0	Tr	0
0555	18.1	0	0	0	Tr (~20 gr)	0	0	0	0	11	0	~ 35	18	Tr	Tr	Tr	0
0556	14.2	0	0	0	Tr	0	0	0	0	0	0	2	2	0	Tr	Tr	0
0558	17.5	0	0	0	Tr (~100 gr)	0	0	0	0	1	3	2	0	Tr	Tr	Tr	0
0559	17.3	1	1	0	0	1	0	0	0	4	4	~ 25	11	Tr	Tr	Tr	0
0560	17.6	0	0	0	0	0	0	0	0	0	0	0	0	Tr	0	0	0
0561	19.8	0	0	0	0	0	0	0	0	0	0	0	0	0	Tr	Tr	0
0562	19.9	0	0	0	Tr (~20 gr)	3	0	0	0	1	~ 25	9	4	0	0	0	0
0566	16.9	0	0	0	0	0	0	0	0	0	0	1	0	0	0	Tr	0
0567	10.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Tr	0
0568	18.3	0	0	0	0	1	0	0	0	1	0	3	1	0	0	Tr	0
0569	13.3	0	0	0	Tr (2 gr)	0	0	0	0	0	0	0	0	Tr	0	Tr	0
0570	19.2	0	0	0	Tr (5 gr)	3	0	0	0	0	0	37	25	Tr	0	Tr	Tr
0574	16.2	0	0	0	0	0	0	0	0	0	0	4	1	Tr	0	Tr	0
0575	15.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Tr	0
0576	21.6	0	0	0	Tr (~25 gr)	2	0	0	0	0	0	12	9	Tr	0	Tr	0
0577	17.9	0	0	0	0	0	0	0	0	1	0	0	0	Tr	0	0	0
0578	15.4	0	0	0	Tr (~40 gr)	0	0	0	0	0	0	6	3	Tr	0	1	0
0589	15.2	0	0	0	Tr (~20 gr)	0	0	0	0	3	~ 60	3	2	Tr	0	0	0
0598	3.4	0	0	0	Tr (1 gr)	0	0	0	0	0	0	0	0	Tr	Tr	0	Tr
0599	18.1	2	2	0	Tr (3 gr)	0	0	0	0	0	0	5	2	0	0	Tr	0

Sample Number	Fay	Opx	Chromite		Red Rutile	Fo	Native Gold	Mn Epidote	Others	Total MMSIMs					
KAP-	%	%	# MMSIM grains (raw data)	Est. # of grains	# grains	# grains	# picked grains	# picked grains	# grains	**VMS** corundum,gahnite, rutile,Mn-epidote, cpy, Au, Ky**,Sil**,St**,Opx**,Sps**		**SKARN** Fo, cpy, Au, gross gnt		**Ni-Cu massive sulphide** low Cr-diop, chromite, rutile, cpy, Fay, opx**	
										R	**N**	**R**	**N**	**R**	**N**
0542	0	0	0	0	0	0	0	0	-	0	0	0	0	0	0
0543	0	1	0	0	0	0	0	0	-	0	0	0	0	0	0
0544	0	5	0	0	0	0	0	0	-	0	0	0	0	0	0
0545	0	10	0	0	0	0	0	0	-	1	1	0	0	0	0
0546	0	Tr	1	0	0	0	0	0	-	1	1	0	0	3	2
0547	0	Tr	0	0	0	0	0	0	-	0	0	0	0	6	5
0548	0	2	0	0	0	0	0	0	-	0	0	0	0	0	0
0549	0	1	0	0	0	0	0	0	-	0	0	0	0	6	5
0550	0	1	1	0	2	0	0	0	-	5	4	0	0	27	24
0551	0	1	4	0	0	0	0	1	-	2	2	1	1	22	21
0552	0	1	0	0	0	0	0	0	-	0	0	0	0	7	6
0553	0	2	0	0	0	0	0	0	-	0	0	0	0	2	2
0554	0	2	0	0	0	0	0	0	-	0	0	0	0	7	6
0555	0	1	4	0	35	0	0	0	-	46	38	0	0	57	47
0556	0	2	0	0	0	0	0	0	-	0	0	0	0	2	2
0558	0	4	0	0	0	0	3	0	-	7	6	3	3	0	0
0559	0	4	0	0	0	0	1	0	*see table 5	10	9	2	2	12	10
0560	0	1	0	0	0	0	1	0	-	1	1	1	1	0	0
0561	0	5	0	0	0	0	6	0	-	6	5	6	5	0	0
0562	0	Tr	0	0	0	0	4	1	*see table 5	31	23	4	3	4	3
0566	0	4	0	0	0	0	3	0	-	3	3	3	3	0	0
0567	0	Tr	0	0	0	0	0	0	-	0	0	0	0	0	0
0568	0	Tr	0	0	0	1	0	0	-	1	1	1	1	1	1
0569	0	Tr	0	0	0	0	0	0	-	0	0	0	0	0	0
0570	0	Tr	2	0	0	1	4	0	*see table 5	4	3	5	4	27	21
0574	0	2	0	0	0	0	0	0	*see table 5	0	0	0	0	1	1
0575	0	3	0	0	0	0	0	0	-	0	0	0	0	0	0
0576	0	2	0	0	9	0	0	0	-	9	6	0	0	18	13
0577	0	1	0	0	0	0	0	0	-	1	1	0	0	0	0
0578	0	Tr	0	0	3	0	0	0	*see table 5	3	3	0	0	6	6
0589	0	3	0	0	0	0	0	0	-	63	62	0	0	2	2
0598	0	Tr	0	0	0	0	0	0	-	0	0	0	0	0	0
0599	0	2	0	0	0	0	0	0	-	2	2	2	2	4	3

Sample Number	Table Feed	Chalcopyrite		Molybdenite	Pyrite	Spinels (raw data) # grains				Corundum		low Cr-Diopside		Ky	Sil	St	Sps
KAP-	(Kg)	# est. grains	Picked grains	Picked grains	%	Other Spinel	Hercynite	Gahnite MgO<2wt%	Gahnite MgO>2wt%	Ruby Corundum	sapphirine/ sapphire grains	Picked grains	Probed grains	%	%	%	%
					(# grains)	ODM	ODM	GL	GL			ODM	GL				
0600	18.6	0	0	0	Tr (1 gr)	0	0	0	0	0	0	3	3	Tr	0	Tr	0
0601	17.8	0	0	0	Tr (2 gr)	0	0	0	0	0	0	~ 60	6	Tr	0	Tr	0
0602	15.7	0	0	0	0	0	0	0	0	0	0	6	4	0	0	Tr	0
0603	19.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Tr	0
0604	12.5	2	2	0	Tr (3 gr)	0	0	0	0	5	3	7	8	Tr	0	Tr	0
0605	12.9	1	1	0	Tr (1 gr)	1	0	0	0	0	0	9	5	0.5	Tr	Tr	0
0606	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0607	14.7	0	0	0	0	0	0	0	0	0	1	1	0	Tr	0	Tr	0
0630	12.7	0	0	0	Tr (8 gr)	1	0	0	0	0	1	11	4	Tr	Tr	Tr	0
0631	16.5	0	0	0	0	0	0	0	0	0	0	9	5	0	0	0	0
0635	10.5	0	0	0	0	2	0	0	0	1	0	~ 25	5	Tr	0	Tr	0
0636	10.8	3	3	0	Tr (5 gr)	0	0	0	0	1	0	12	10	Tr	0	Tr	0
0655	13.9	0	0	0	0	0	0	0	0	0	0	0	0	Tr	Tr	Tr	0
0701	7.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0711	15	0	0	0	0	1	0	0	0	0	0	8	6	Tr	Tr	0	Tr
0712	15.4	0	0	0	Tr (~50 gr)	4	0	0	0	1	1	6	4	Tr	Tr	0	0
0715	9	1	1	0	Tr (4 gr)	1	0	0	0	0	1	1	1	0	0	Tr	0
0716	7.8	0	0	0	0	0	0	0	0	0	0	1	1	Tr	Tr	Tr	0
0717	11.8	1	1	0	Tr (~40 gr)	2	0	0	0	0	0	4	2	Tr	0	0	0
0718	17	0	0	0	0	4	0	0	0	0	7	12	9	Tr	Tr	Tr	0
0719	9.8	1	1	0	Tr (~25 gr)	2	0	0	0	0	1	20	16	0.5	Tr	Tr	0
0790	17.9	0	0	0	Tr (3 gr)	0	0	0	0	0	0	8	5	Tr	Tr	Tr	0
0939	18.1	0	0	0	0	0	0	0	0	0	0	1	0	Tr	0	Tr	0
0940	14.4	0	0	0	0	0	0	0	0	0	0	0	0	Tr	0	Tr	0
0941	18.9	0	0	0	0	0	0	0	0	0	0	0	0	Tr	0	0	0
0951	12.9	1	1	0	Tr (2 gr)	0	0	0	0	0	0	4	4	Tr	0	Tr	0
0952	18.8	0	0	0	0	0	0	0	0	0	0	3	2	Tr	0	Tr	0
0953	20.5	0	0	0	0	0	0	0	0	0	0	5	3	0	Tr	Tr	0
0954	18.3	0	0	0	0	1	0	0	0	0	0	5	5	Tr	0	Tr	0
0955	22.7	0	0	0	0	0	0	0	0	0	0	0	0	Tr	0	Tr	0
0956	14.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0957	16.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0958	18.8	0	0	0	0	3	0	0	0	1	0	~ 40	12	0	Tr	Tr	0

Sample Number	Fay	Opx	Chromite		Red Rutile	Fo	Native Gold	Mn Epidote	Others	Total MMSIMs					
KAP-	%	%	# MMSIM grains (raw data)	Est. # of grains	# grains	# grains	# picked grains	# picked grains	# grains	VMS corundum,gahnite, rutile,Mn-epidote, cpy, Au, Ky**,Sil**,St**,Opx**,Sps**		SKARN Fo, cpy, Au, gross gnt		Ni-Cu massive sulphide low Cr-diop, chromite, rutile, cpy, Fay, opx**	
										R	N	R	N	R	N
0600	0	Tr	0	0	0	0	1	0	-	1	1	1	1	3	2
0601	0	Tr	0	0	0	0	0	0	-	0	0	0	0	6	5
0602	0	2	0	0	0	0	0	0	-	0	0	0	0	4	4
0603	0	2	0	0	0	0	0	0	-	0	0	0	0	0	0
0604	0	Tr	0	0	0	0	0	1	1 gross gnt	11	13	3	4	10	12
0605	0	Tr	16	25	1	0	0	0	-	2	2	1	1	23	27
0606	0	0	0	0	0	0	0	0	-	0	0	0	0	0	0
0607	0	0	0	0	0	0	0	0	-	1	1	0	0	0	0
0630	0	Tr	0	0	0	0	0	0	*see table 5	1	1	0	0	4	5
0631	0	1	0	0	0	0	0	0	-	0	0	0	0	5	5
0635	0	Tr	0	0	1	0	0	0	*see table 5	2	3	0	0	6	9
0636	0	Tr	3	0	0	1	0	0	*see table 5	4	6	4	6	16	22
0655	0	Tr	0	0	0	0	0	0	-	0	0	0	0	0	0
0701	0	0	0	0	0	0	0	0	-	0	0	0	0	0	0
0711	0	Tr	0	0	0	0	0	0	-	0	0	0	0	6	6
0712	0	Tr	7	18	0	0	0	0	-	2	2	0	0	11	11
0715	0	Tr	17	0	0	0	0	0	-	2	3	1	2	19	32
0716	0	Tr	3	0	0	0	0	0	-	0	0	0	0	4	8
0717	0	Tr	0	0	0	0	0	0	-	1	1	1	1	3	4
0718	0	2	0	0	1	0	0	0	*see table 5	8	7	0	0	10	9
0719	0	1	0	0	6	1	0	0	-	8	12	2	3	23	35
0790	0	2	0	0	0	0	0	0	-	0	0	0	0	5	4
0939	0	2	0	0	0	0	0	0	1 gross gnt	0	0	1	1	0	0
0940	0	Tr	0	0	0	0	0	0	-	0	0	0	0	0	0
0941	0	Tr	0	0	0	0	11	0	-	11	9	11	9	0	0
0951	0	Tr	2	0	0	0	0	0	-	1	1	1	1	7	8
0952	0	Tr	0	0	0	0	0	0	-	0	0	0	0	2	2
0953	0	Tr	0	0	0	0	0	2	-	2	1	0	0	3	2
0954	0	Tr	0	0	0	0	0	0	-	0	0	0	0	5	4
0955	0	Tr	1	0	0	0	0	0	-	0	0	0	0	1	1
0956	0	0	0	0	0	0	0	0	-	0	0	0	0	0	0
0957	0	0	0	0	0	0	0	0	-	0	0	0	0	0	0
0958	0	Tr	0	0	0	0	0	0	*see table 5	1	1	0	0	12	10

Sample Number	Table Feed	Chalcopyrite		Molybdenite	Pyrite	Spinels (raw data) # grains				Corundum		low Cr-Diopside		Ky	Sil	St	Sps
KAP-	(Kg)	# est. grains	Picked grains	Picked grains	%	Other Spinel	Hercynite	Gahnite MgO<2wt%	Gahnite MgO>2wt%	Ruby Corundum	sapphirine/ sapphire grains	Picked grains	Probed grains	%	%	%	%
					(# grains)	ODM	ODM	GL	GL			ODM	GL				
0959	12.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0960	16.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0961	15.3	0	0	0	0	0	0	0	0	0	0	0	0	Tr	Tr	0	0
0962	19.2	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
0963	19.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Tr
0964	18.5	0	0	0	Tr (3 gr)	1	0	0	0	0	0	2	2	0	0	Tr	0
0965	13.2	0	0	0	0	0	0	0	0	0	0	2	2	Tr	0	Tr	0
0966	11	1	1	1	Tr (~20 gr)	0	0	0	0	0	0	3	2	Tr	0	Tr	0
0967	16.3	0	0	0	Tr (1 gr)	1	0	0	0	3	2	10	6	Tr	0	Tr	0
0968	17.4	0	0	0	0	0	0	0	0	0	0	2	2	Tr	Tr	Tr	0
0969	11.7	0	0	0	Tr (7 gr)	0	0	0	0	0	0	3	2	Tr	0	Tr	0
0970	13.4	0	0	0	0	0	0	0	0	0	0	1	0	Tr	Tr	Tr	0
0971	14.9	0	0	0	0	0	0	0	0	0	0	0	0	Tr	0	Tr	0
0972	8.1	0	0	0	Tr (1 gr)	1	0	0	0	1	0	3	3	Tr	0	Tr	0
0973	16	0	0	0	0	0	0	0	0	0	0	1	1	0	0	Tr	0
0974	10.6	0	0	0	0	0	0	0	0	0	0	1	1	Tr	0	Tr	0
0975	15.4	0	0	0	0	1	0	0	0	1	0	7	5	Tr	Tr	Tr	0
0976	14.1	0	0	0	Tr (1 gr)	0	0	0	0	0	0	2	2	Tr	0	Tr	0
0977	14.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Tr	0
0978	16.1	0	0	0	0	0	0	0	0	0	0	0	0	Tr	0	Tr	0
0979	15.9	0	0	0	0	0	0	0	0	0	0	5	5	Tr	0	Tr	0
0980	16.7	0	0	0	0	0	0	0	0	0	0	10	10	0	0	Tr	0
0981	12.7	0	0	0	0	2	0	0	0	0	0	2	2	0	Tr	Tr	0
0982	16.7	0	0	0	Tr (2 gr)	2	0	0	0	0	4	7	7	Tr	0	Tr	0
0983	16.3	0	0	0	0	0	0	0	0	0	0	1	1	Tr	0	Tr	0
0984	12.4	0	0	0	Tr (3 gr)	0	0	0	0	1	0	9	6	Tr	0	Tr	0
0985	15.3	0	0	0	0	0	0	0	0	0	0	1	1	Tr	0	Tr	0
0986	20.2	0	0	0	0	1	0	0	0	0	1	3	1	Tr	Tr	Tr	0
0987	11.6	0	0	0	0	2	0	0	0	2	2	~ 25	14	Tr	0	Tr	0
0988	18.5	0	0	0	Tr (2 gr)	4	0	0	0	0	1	10	8	Tr	0	Tr	0
0989	13.8	0	0	0	0	2	0	0	0	0	1	6	4	Tr	Tr	Tr	Tr
0990	16.7	0	0	0	0	0	0	0	0	0	2	3	1	Tr	0	Tr	0
0991	14.3	0	0	0	Tr (3 gr)	3	0	0	0	5	0	7	5	Tr	0	Tr	0

Sample Number	Fay	Opx	Chromite		Red Rutile	Fo	Native Gold	Mn Epidote	Others	Total MMSIMs					
KAP-	%	%	# MMSIM grains (raw data)	Est. # of grains	# grains	# grains	# picked grains	# picked grains	# grains	**VMS** corundum,gahnite, rutile,Mn-epidote, cpy, Au, Ky**,Sil**,St**,Opx**,Sps**		**SKARN** Fo, cpy, Au, gross gnt		**Ni-Cu massive sulphide** low Cr-diop, chromite, rutile, cpy, Fay, opx**	
										R	**N**	**R**	**N**	**R**	**N**
0959	0	Tr	0	0	0	0	0	0	-	0	0	0	0	0	0
0960	0	Tr	0	0	0	0	0	0	-	0	0	0	0	0	0
0961	0	Tr	0	0	0	0	0	0	-	0	0	0	0	0	0
0962	0	2	0	0	0	0	0	0	-	0	0	0	0	0	0
0963	0	0	0	0	0	0	1	0	-	1	1	1	1	0	0
0964	0	3	0	0	0	0	0	0	1 gross gnt	0	0	1	1	2	2
0965	0	1	1	0	0	0	0	0	-	0	0	0	0	3	3
0966	0	2	0	0	0	0	0	0	-	1	1	1	1	3	4
0967	0	Tr	0	0	0	0	0	1	-	6	6	0	0	6	6
0968	0	Tr	0	0	0	0	1	0	-	1	1	1	1	2	2
0969	0	Tr	0	0	0	0	1	0	-	1	1	1	1	2	3
0970	0	Tr	0	0	0	0	0	0	-	0	0	0	0	0	0
0971	0	Tr	0	0	0	0	0	0	-	0	0	0	0	0	0
0972	0	Tr	7	0	0	0	0	0	-	1	2	0	0	10	19
0973	0	0	0	0	0	0	2	0	-	2	2	2	2	1	1
0974	0	Tr	0	0	0	0	0	1	-	1	1	0	0	1	1
0975	0	Tr	0	0	0	0	0	1	-	2	2	0	0	5	5
0976	0	Tr	5	0	0	0	0	0	-	0	0	0	0	7	7
0977	0	1	0	0	0	0	0	0	-	0	0	0	0	0	0
0978	0	0	0	0	0	0	0	0	-	0	0	0	0	0	0
0979	0	1	0	0	0	0	0	0	-	0	0	0	0	5	5
0980	0	2	0	0	0	0	0	0	-	0	0	0	0	10	9
0981	0	2	0	0	1	0	0	0	-	1	1	0	0	3	4
0982	0	2	0	0	3	0	0	0	*see table 5	7	6	0	0	10	9
0983	0	2	0	0	0	0	0	0	-	0	0	0	0	1	1
0984	0	1	0	0	0	1	0	0	-	1	1	1	1	6	7
0985	0	Tr	0	0	0	0	0	0	-	0	0	0	0	1	1
0986	0	5	0	0	0	0	0	0	-	1	1	0	0	1	1
0987	0	Tr	0	0	10	0	0	0	-	14	18	0	0	24	31
0988	0	1	0	0	0	0	0	0	*see table 5	1	1	0	0	8	6
0989	0	Tr	0	0	0	0	0	0	-	1	1	0	0	4	4
0990	0	5	0	0	1	0	0	0	*see table 5	3	3	0	0	2	2
0991	0	Tr	3	0	0	0	0	1	-	6	6	0	0	8	8

Sample Number	Table Feed	Chalcopyrite		Molybdenite	Pyrite	Spinels (raw data) # grains				Corundum		low Cr-Diopside		Ky	Sil	St	Sps
KAP-	(Kg)	# est. grains	Picked grains	Picked grains	%	Other Spinel	Hercynite	Gahnite MgO<2wt%	Gahnite MgO>2wt%	Ruby Corundum	sapphirine/ sapphire grains	Picked grains	Probed grains	%	%	%	%
					(# grains)	ODM	ODM	GL	GL			ODM	GL				
0992	12.2	1	1	0	0	15	1	0	0	5	8	2	1	Tr	0	0	0
0993	18.2	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
0994	16.7	0	0	0	0	0	0	0	0	0	0	~ 25	6	Tr	Tr	Tr	0
0995	9.9	1	1	0	0	50	0	0	0	~ 20	4	~ 50	16	Tr	Tr	Tr	0
0996	17.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0997	15.7	0	0	0	Tr (3 gr)	4	0	0	0	9	9	~ 40	12	0.5	Tr	Tr	0
0998	13.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Tr	0
0999	11.6	0	0	0	Tr (5 gr)	0	0	0	0	0	0	4	1	Tr	Tr	Tr	0
1000	19	2	2	0	Tr (~10 gr)	1	0	0	0	0	0	12	8	Tr	Tr	Tr	0
1001	7.5	0	0	0	Tr (~20 gr)	0	0	0	0	0	0	0	0	0	0	0	0
1002	8.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Tr	0
1003	8.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Tr	0
1004	10.5	0	0	0	Tr (1 gr)	0	0	0	0	0	0	3	2	Tr	0	Tr	0
1005	7.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Tr	0
1006	11.1	0	0	0	Tr (10 gr)	0	0	0	0	0	0	1	1	Tr	Tr	Tr	Tr
1007	9.1	0	0	0	30% (~70 gr)	0	0	0	0	0	0	0	0	0	0	Tr	0
1008	8.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Tr	0
1009	9.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Tr	0
1010	10.2	1	1	0	Tr (5 gr)	0	0	0	0	0	0	5	1	Tr	0	0	0
1011	12	0	0	0	0	0	0	0	0	0	0	0	0	Tr	0	Tr	0
1012	15	0	0	0	Tr (1 gr)	0	1	0	0	1	0	6	6	Tr	0	Tr	0
1013	12.6	0	0	0	0	0	0	0	0	0	0	0	0	Tr	0	0	0
1014	13.9	16	16	0	0.5 (~250 gr)	0	0	0	0	0	0	1	0	Tr	0	0	0
1015	11	0	0	0	0	0	0	0	0	0	0	2	1	Tr	0	0	0
1016	11.2	0	0	0	Tr (2 gr)	0	0	0	0	0	0	1	0	Tr	0	Tr	0
1017	13.6	0	0	0	0	0	0	0	0	0	0	8	8	Tr	Tr	Tr	0
1018	14.1	0	0	0	0	0	0	0	0	0	0	0	0	Tr	Tr	Tr	0
1019	13.1	0	0	0	0	0	0	0	0	0	0	1	1	Tr	0	0	0
1020	11.2	0	0	0	0	0	0	0	0	2	0	7	6	Tr	0	Tr	0
1021	N/A	0	0	0	0	0	0	0	0	0	0	0	0				
1022	14.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1023	9.3	0	0	0	Tr (3 gr)	1	0	0	0	0	0	4	4	Tr	0	Tr	0
1024	12	0	0	0	Tr (3 gr)	1	0	0	0	0	0	5	4	Tr	Tr	Tr	0

Sample Number	Fay	Opx	Chromite		Red Rutile	Fo	Native Gold	Mn Epidote	Others	Total MMSIMs					
KAP-	%	%	# MMSIM grains (raw data)	Est. # of grains	# grains	# grains	# picked grains	# picked grains	# grains	**VMS** corundum,gahnite, rutile,Mn-epidote, cpy, Au, Ky**,Sil**,St**,Opx**,Sps**)		**SKARN** Fo, cpy, Au, gross gnt		**Ni-Cu massive sulphide** low Cr-diop, chromite, rutile, cpy, Fay, opx**	
										R	N	R	N	R	N
0992	0	0.5	0	0	0	0	0	0	*see table 5	14	17	1	1	2	2
0993	0	Tr	0	0	0	0	1	0	-	2	2	1	1	0	0
0994	0	Tr	0	0	0	0	0	0	-	0	0	0	0	6	5
0995	0	0	0	0	2	0	0	0	*see table 5	27	41	1	2	19	29
0996	0	7	0	0	0	0	0	0	-	0	0	0	0	0	0
0997	0	5	3	0	13	0	0	0	-	31	30	0	0	28	27
0998	0	Tr	0	0	0	0	1	0	-	1	1	1	1	0	0
0999	0	1	0	0	0	0	0	0	-	0	0	0	0	1	1
1000	0	1	1	0	0	0	0	0	-	2	2	2	2	11	9
1001	0	0	0	0	0	0	0	0	-	0	0	0	0	0	0
1002	0	Tr	0	0	0	0	0	0	-	0	0	0	0	0	0
1003	0	Tr	0	0	0	0	0	0	-	0	0	0	0	0	0
1004	0	Tr	0	0	0	0	0	0	-	0	0	0	0	2	3
1005	0	0	0	0	0	0	0	0	-	0	0	0	0	0	0
1006	0	Tr	3	0	0	3	0	0	-	0	0	3	4	4	5
1007	0	5	0	0	0	0	0	0	-	0	0	0	0	0	0
1008	0	2	0	0	0	0	0	0	-	0	0	0	0	0	0
1009	0	0	0	0	0	0	0	0	-	0	0	0	0	0	0
1010	0	2	0	0	0	0	0	0	-	1	1	1	1	2	3
1011	0	Tr	0	0	0	0	0	0	-	0	0	0	0	0	0
1012	0	3	0	0	0	0	0	3	-	4	4	0	0	6	6
1013	0	Tr	0	0	0	0	0	0	-	0	0	0	0	0	0
1014	0	0	0	0	0	0	0	0	-	16	17	16	17	16	17
1015	0	Tr	0	0	0	0	0	0	-	0	0	0	0	1	1
1016	0	0	0	0	0	0	3	0	-	3	4	3	4	0	0
1017	0	Tr	0	0	0	0	0	0	-	0	0	0	0	8	9
1018	0	Tr	0	0	0	0	0	0	-	0	0	0	0	0	0
1019	0	Tr	0	0	0	0	0	0	-	0	0	0	0	1	1
1020	0	Tr	0	0	1	1	0	0	-	3	4	1	1	7	9
1021			0	0	0	0		0	-	0	0	0	0	0	0
1022	0	0	0	0	0	0	0	0	-	0	0	0	0	0	0
1023	0	Tr	1	0	0	0	0	0	-	0	0	0	0	5	8
1024	0	Tr	0	0	5	0	0	0	-	5	6	0	0	9	11

Sample Number	Table Feed	Chalcopyrite		Molybdenite	Pyrite	Spinels (raw data) # grains				Corundum		low Cr-Diopside		Ky	Sil	St	Sps
KAP-	(Kg)	# est. grains	Picked grains	Picked grains	%	Other Spinel	Hercynite	Gahnite MgO<2wt%	Gahnite MgO>2wt%	Ruby Corundum	sapphirine/ sapphire grains	Picked grains	Probed grains	%	%	%	%
					(# grains)	ODM	ODM	GL	GL			ODM	GL				
1025	12.2	0	0	0	0	0	0	0	0	0	0	9	6	0	Tr	Tr	0
1051	12.9	0	0	0	0	0	0	0	0	0	0	4	3	Tr	0	Tr	0
1052	7.8	1	1	0	0	0	0	0	0	0	0	1	1	Tr	0	Tr	0
1053	11.7	0	0	0	0	1	0	0	0	0	0	0	0	Tr	0	Tr	0
1054	16.1	0	0	0	0	1	0	0	0	0	4	7	4	Tr	0	Tr	0
1055	12.7	0	0	0	1% (~100 gr)	0	0	0	0	0	0	2	2	0	0	Tr	0
1056	13.9	0	0	0	1% (~100 gr)	0	0	0	0	0	0	5	3	0	0	0	0
1057	15.3	0	0	0	0	0	0	0	0	7	3	18	10	Tr	Tr	Tr	0
1058	13.6	0	0	0	0	2	0	0	0	10	1	23	15	Tr	0	Tr	0
1059	8.9	0	0	0	0	2	0	0	0	0	0	10	8	Tr	0	Tr	0
1060	14.8	0	0	0	Tr (2 gr)	5	0	0	0	0	0	24	20	Tr	Tr	Tr	0
1061	14.4	0	0	0	0	0	0	0	0	0	1	10	7	Tr	0	Tr	0
1062	13.7	1	1	0	Tr (3 gr)	1	0	0	0	1	1	~ 75	18	Tr	0	Tr	0
1063	16.6	1	1	0	Tr (~20 gr)	0	0	0	0	2	1	13	7	1	Tr	Tr	0
1064	10.3	1	1	0	Tr (1 gr)	0	0	0	0	0	0	3	1	Tr	0	Tr	0
1065	17	0	0	0	0	0	0	0	0	0	0	9	7	Tr	0	Tr	0
1066	16.3	0	0	0	0	5	0	0	0	2	0	19	14	Tr	Tr	Tr	Tr
1067	14.4	0	0	0	0	0	0	0	0	0	0	5	4	Tr	0	Tr	0
1068	15.5	0	0	0	0	0	0	0	0	0	0	15	9	Tr	0	Tr	0
1069	16.3	0	0	0	0	1	0	0	0	0	0	2	2	Tr	0	0	0
1070	12.5	0	0	0	0	0	0	0	0	0	0	0	0	0	Tr	0	0
1071	13.5	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	Tr
1072	11.4	0	0	0	Tr (10 gr)	0	0	0	0	0	0	12	11	0	Tr	Tr	0
1073	10.8	0	0	0	0	1	0	0	0	1	0	11	8	0	0	Tr	0
1074	7	0	0	0	Tr (1 gr)	0	0	0	0	0	0	9	4	Tr	Tr	0	0
1075	9.2	0	0	0	0	0	0	0	0	0	0	4	4	Tr	0	Tr	0
1076	13.7	0	0	0	Tr (2 gr)	0	0	0	0	0	0	3	2	Tr	Tr	Tr	0
1077	14	0	0	0	0	0	0	0	0	0	0	18	15	Tr	Tr	Tr	Tr
1078	18.4	1	1	0	Tr (1 gr)	0	0	0	0	1	0	18	13	Tr	0	Tr	Tr
1079	13.9	0	0	0	Tr (1 gr)	0	0	0	0	0	0	19	11	Tr	0	Tr	Tr
1080	16.5	0	0	0	Tr (1 gr)	0	0	0	0	0	0	2	1	Tr	0	Tr	0
1081	6.1	0	0	0	Tr (~20 gr)	0	0	0	0	0	0	1	1	0	0	Tr	0
1082	18.3	0	0	0	0	1	0	0	0	0	0	~ 30	4	Tr	0	Tr	0

Sample Number	Fay	Opx	Chromite		Red Rutile	Fo	Native Gold	Mn Epidote	Others	Total MMSIMs					
KAP-	%	%	# MMSIM grains (raw data)	Est. # of grains	# grains	# grains	# picked grains	# picked grains	# grains	**VMS** corundum,gahnite, rutile,Mn-epidote, cpy, Au, Ky**,Sil**,St**,Opx**,Sps**		**SKARN** Fo, cpy, Au, gross gnt		**Ni-Cu massive sulphide** low Cr-diop, chromite, rutile, cpy, Fay, opx**	
										R	**N**	**R**	**N**	**R**	**N**
1025	0	Tr	0	0	0	0	0	0	-	0	0	0	0	6	7
1051	0	25	0	0	0	0	0	0	-	0	0	0	0	3	3
1052	0	1	0	0	0	0	0	0	-	1	2	1	2	2	4
1053	0	Tr	0	0	0	0	0	0	-	0	0	0	0	0	0
1054	0	3	0	0	0	0	0	0	-	4	4	0	0	4	4
1055	0	2	0	0	0	0	0	0	-	0	0	0	0	2	2
1056	0	Tr	0	0	0	0	0	0	-	0	0	0	0	3	3
1057	0	2	0	0	0	0	0	0	-	10	10	0	0	10	10
1058	0	3	0	0	0	0	1	0	*see table 5	12	13	1	1	15	17
1059	0	Tr	3	0	3	0	0	0	-	3	5	0	0	14	24
1060	0	Tr	0	0	0	0	0	0	-	0	0	0	0	20	20
1061	0	3	1	0	1	0	0	0	-	2	2	0	0	9	9
1062	0	2	0	0	1	0	0	0	-	4	4	1	1	20	22
1063	0	4	0	0	2	0	0	0	-	6	5	1	1	10	9
1064	0	Tr	0	0	2	0	0	0	-	3	4	1	1	4	6
1065	0	2	0	0	0	0	0	0	*see table 5	0	0	0	0	7	6
1066	0	Tr	0	0	0	0	0	0	-	2	2	0	0	14	13
1067	0	3	0	0	0	0	0	0	-	0	0	0	0	4	4
1068	0	Tr	0	0	0	0	0	0	-	0	0	0	0	9	9
1069	0	Tr	0	0	0	0	0	1	-	1	1	0	0	2	2
1070	0	0	0	0	0	0	0	0	-	0	0	0	0	0	0
1071	0	0	0	0	0	0	0	0	-	0	0	0	0	1	1
1072	0	1	1	0	0	0	0	0	1 gross gnt	0	0	1	1	12	16
1073	0	1	0	0	0	0	0	0	-	1	1	0	0	8	11
1074	0	Tr	0	0	0	0	0	0	-	0	0	0	0	4	9
1075	0	Tr	0	0	1	0	0	0	-	1	2	0	0	5	8
1076	0	0	0	0	0	0	0	0	-	0	0	0	0	2	2
1077	0	Tr	0	0	0	0	0	0	-	0	0	0	0	15	16
1078	0	Tr	1	0	0	0	0	1	-	3	2	1	1	15	12
1079	0	Tr	0	0	0	0	0	1	-	1	1	0	0	11	12
1080	0	Tr	0	0	0	0	0	0	-	0	0	0	0	1	1
1081	Tr	0	0	0	0	0	0	0	-	0	0	0	0	1	2
1082	0	2	0	0	0	0	0	0	-	0	0	0	0	4	3

Sample Number	Table Feed	Chalcopyrite		Molybdenite	Pyrite	Spinels (raw data) # grains				Corundum		low Cr-Diopside		Ky	Sil	St	Sps
KAP-	(Kg)	# est. grains	Picked grains	Picked grains	%	Other Spinel	Hercynite	Gahnite MgO<2wt%	Gahnite MgO>2wt%	Ruby Corundum	sapphirine/ sapphire grains	Picked grains	Probed grains	%	%	%	%
					(# grains)	ODM	ODM	GL	GL			ODM	GL				
1083	8.7	0	0	1	Tr (~20 gr)	0	0	0	0	0	0	1	2	Tr	0	Tr	0
1084	17.3	0	0	0	0	0	0	0	0	0	0	5	5	Tr	0	Tr	0
1085	15.6	0	0	0	Tr (2 gr)	1	0	0	0	1	0	8	7	Tr	0	Tr	0
1086	15.2	0	0	0	0	0	0	0	0	1	0	18	13	Tr	0	Tr	0
1087	14.5	0	0	0	0	0	0	0	0	0	0	2	2	0	0	Tr	0
1088	9.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1089	11	0	0	0	Tr (1 gr)	0	0	0	0	0	0	4	3	Tr	Tr	Tr	0
1090	16.6	0	0	0	0	0	0	0	0	1	0	~ 60	8	Tr	Tr	Tr	0
1091	10.2	0	0	0	Tr (1 gr)	2	0	0	0	1	0	20	16	0	0	Tr	Tr
1092	17.2	0	0	0	Tr (1 gr)	0	0	0	0	0	0	16	16	Tr	0	Tr	0
1093	13.3	0	0	0	Tr (1 gr)	0	0	0	0	0	0	2	1	0	0	Tr	0
1094	11.9	0	0	0	0	0	0	0	0	0	0	3	3	0	0	Tr	0
1095	11.8	0	0	0	Tr (3 gr)	0	0	0	0	0	0	20	16	Tr	0	Tr	0
1096	12.3	0	0	0	Tr (1 gr)	1	0	0	0	1	0	~ 30	11	Tr	0	Tr	0
1097	10.2	0	0	1	0	0	0	0	0	0	0	8	7	Tr	1	Tr	0
1098	14.3	0	0	0	0	1	0	0	0	3	0	~ 75	12	Tr	0	Tr	0
1101	12	0	0	0	Tr (1 gr)	0	0	0	0	0	0	0	0	Tr	0	Tr	0
1102	12.6	0	0	0	0	5	0	0	0	0	2	15	9	0	Tr	Tr	0
1103	13.1	0	0	0	0	0	0	0	0	0	0	0	0	Tr	Tr	0	0
1104	10.8	0	0	0	0	0	0	0	0	0	0	0	0	Tr	0	0	0
1105	12.3	0	0	0	Tr (4 gr)	0	0	0	0	0	0	16	12	Tr	0	Tr	0
1106	8.5	0	0	1	Tr (~35 gr)	2	0	0	0	4	0	8	7	Tr	Tr	Tr	0
1107	13.7	0	0	0	0	0	0	0	0	0	0	9	9	Tr	Tr	Tr	0
1108	9.4	2	2	0	Tr (5 gr)	2	0	0	0	0	0	6	5	0	Tr	Tr	0
1109	8.7	0	0	0	Tr (~50)	0	0	0	0	0	0	4	4	Tr	Tr	Tr	0
1110	17.2	0	0	0	0	1	0	0	0	1	0	~ 30	11	Tr	Tr	Tr	0
1111	14.5	0	0	0	0	0	0	0	0	0	0	0	0	Tr	0	Tr	0
1112	12.3	0	0	0	0	0	0	0	0	0	0	3	0	Tr	0	Tr	0
1113	17.3	0	0	0	Tr (1 gr)	0	0	0	0	1	0	6	4	Tr	0	Tr	0

Sample Number	Fay	Opx	Chromite		Red Rutile	Fo	Native Gold	Mn Epidote	Others	Total MMSIMs					
KAP-	%	%	# MMSIM grains (raw data)	Est. # of grains	# grains	# grains	# picked grains	# picked grains	# grains	**VMS** corundum,gahnite, rutile,Mn-epidote, cpy, Au, Ky**,Sil**,St**,Opx**,Sps**		**SKARN** Fo, cpy, Au, gross gnt		**Ni-Cu massive sulphide** low Cr-diop, chromite, rutile, cpy, Fay, opx**	
										R	**N**	**R**	**N**	**R**	**N**
1083	0	Tr	0	0	0	0	0	0	-	0	0	0	0	2	3
1084	0	1	0	0	0	0	0	0	-	0	0	0	0	5	4
1085	0	1	0	0	0	0	0	0	-	1	1	0	0	7	7
1086	0	1	0	0	0	0	0	3	-	4	4	0	0	13	13
1087	0	Tr	0	0	0	0	0	0	-	0	0	0	0	2	2
1088	0	Tr	0	0	0	0	0	0	-	0	0	0	0	0	0
1089	0	Tr	0	0	0	0	0	0	-	0	0	0	0	3	4
1090	0	Tr	0	0	0	0	0	0	-	1	1	0	0	8	7
1091	0	Tr	2	0	0	0	0	0	-	1	1	0	0	18	26
1092	0	1	0	0	0	0	0	0	-	0	0	0	0	16	14
1093	0	Tr	0	0	0	0	0	0	-	0	0	0	0	1	1
1094	0	Tr	0	0	0	0	0	0	-	0	0	0	0	3	4
1095	0	Tr	0	0	8	0	0	0	-	8	10	0	0	24	31
1096	0	Tr	0	0	2	0	0	1	-	4	5	0	0	13	16
1097	0	0	3	0	0	0	0	0	-	0	0	0	0	10	15
1098	0	Tr	0	0	0	0	0	0	-	3	3	0	0	12	13
1101	0	0	0	0	0	0	0	1	-	1	1	0	0	0	0
1102	0	0	0	0	0	0	0	0	-	2	2	0	0	9	11
1103	0	0	0	0	0	0	0	0	-	0	0	0	0	0	0
1104	0	0	0	0	0	0	0	0	-	0	0	0	0	0	0
1105	0	3	0	0	0	0	0	0	-	0	0	0	0	12	15
1106	0	Tr	4	0	0	0	0	1	-	5	9	0	0	11	19
1107	0	Tr	1	0	0	0	0	0	-	0	0	0	0	10	11
1108	0	Tr	2	0	0	0	0	0	-	2	3	2	3	9	14
1109	0	Tr	1	0	3	0	0	0	-	3	5	0	0	8	14
1110	0	6	0	0	0	0	0	1	-	2	2	0	0	11	10
1111	0	Tr	0	0	0	0	0	0	-	0	0	0	0	0	0
1112	0	1	0	0	0	0	0	0	-	0	0	0	0	0	0
1113	0	0	0	0	0	0	0	0	-	1	1	0	0	4	3

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APPENDIX G : Number of Total, Reshaped, Modified and Pristine Gold Grains within Each Sample. Data is Presented as Raw Data and Normalized Data.

Summary of Abbreviations

Kg: Kilogram
R: Raw
N: Normalized

Sample	UTM		Township	Table	Total		Reshaped		Modified		Pristine	
KAP-	East	North		Feed (Kg)	R	N	R	N	R	N	R	N
0001	240814	5308354	Noganosh	8.2	0	0	0	0	0	0	0	0
0002	246875	5295580	Roy	9.5	3	5	3	5	0	0	0	0
0003	238567	5285801	Suganaqueb	10.6	2	3	2	3	0	0	0	0
0004	240672	5288381	Suganaqueb	11.1	1	1	0	0	1	1	0	0
0005	242576	5288502	Suganaqueb	9.5	2	3	2	3	0	0	0	0
0006	241582	5288006	Suganaqueb	10.1	2	3	1	1	1	1	0	0
0007	246666	5288660	Suganaqueb	10.7	2	3	2	3	0	0	0	0
0008	244972	5290826	Suganaqueb	15.4	0	0	0	0	0	0	0	0
0009	249407	5292661	Tabobondung	12.9	3	3	3	3	0	0	0	0
0010	248867	5291724	Tabobondung	13.8	0	0	0	0	0	0	0	0
0011	260894	5287906	Waswa	11.9	0	0	0	0	0	0	0	0
0012	257534	5289246	Tabobondung	12.3	0	0	0	0	0	0	0	0
0013	272186	5287796	Wawia	10.6	1	1	0	0	1	1	0	0
0014	277845	5283646	Windego	14.6	0	0	0	0	0	0	0	0
0015	277527	5283581	Windego	15.8	1	1	1	1	0	0	0	0
0016	279790	5280192	Beilhartz	13.1	2	2	2	2	0	0	0	0
0017	281215	5280180	Beilhartz	13.2	0	0	0	0	0	0	0	0
0018	232821	5305773	Nebonaionquet	9.4	0	0	0	0	0	0	0	0
0019	231248	5301534	Restoule	11.1	0	0	0	0	0	0	0	0
0020	233187	5300319	Restoule	10.6	1	1	1	1	0	0	0	0
0021	233466	5299441	Restoule	17.8	1	1	1	1	0	0	0	0
0022	230571	5296236	Restoule	14.1	0	0	0	0	0	0	0	0
0023	222004	5299616	Redsky	12.2	0	0	0	0	0	0	0	0
0024	221913	5297904	Redsky	7.1	0	0	0	0	0	0	0	0
0025	225324	5297642	Redsky	11.1	0	0	0	0	0	0	0	0
0026	225268	5297569	Redsky	8.9	0	0	0	0	0	0	0	0
0027	235965	5303211	Restoule	10.6	2	3	2	3	0	0	0	0
0031	254303	5247551	Loach	8.8	0	0	0	0	0	0	0	0
0032	252738	5246529	Loach	8	0	0	0	0	0	0	0	0
0033	250517	5246441	Loach	8.2	0	0	0	0	0	0	0	0
0034	249396	5245070	Loach	9.8	0	0	0	0	0	0	0	0
0035	282672	5250234	Moen	13.7	0	0	0	0	0	0	0	0
0036	280274	5250746	Moen	15	0	0	0	0	0	0	0	0
0037	276184	5252603	Moen	11.6	0	0	0	0	0	0	0	0
0038	275756	5252610	Moen	14.7	4	4	4	4	0	0	0	0
0039	271436	5252931	McParland	9.4	0	0	0	0	0	0	0	0
0040	271963	5249912	McParland	15	0	0	0	0	0	0	0	0
0041	267897	5249830	McParland	12.8	0	0	0	0	0	0	0	0
0042	262139	5245053	McAughey	14	0	0	0	0	0	0	0	0
0043	262060	5247175	McAughey	12	0	0	0	0	0	0	0	0
0044	224709	5236449	Slater	15.9	4	4	4	4	0	0	0	0
0045	220242	5230008	Slater	14.3	0	0	0	0	0	0	0	0
0046	231873	5231456	Smilsky	11.6	0	0	0	0	0	0	0	0
0047	232373	5232829	Smilsky	9.9	0	0	0	0	0	0	0	0
0048	223153	5231126	Slater	16	2	2	2	2	0	0	0	0
0049	226406	5232192	Slater	17.6	0	0	0	0	0	0	0	0
0050	242831	5234205	Tolmonen	17.4	2	2	2	2	0	0	0	0
0051	241139	5232823	Tolmonen	14	0	0	0	0	0	0	0	0
0052	227709	5226199	Nicolet	13.5	0	0	0	0	0	0	0	0
0053	231260	5227228	Smilsky	18.6	1	1	1	1	0	0	0	0
0054	233555	5227217	Smilsky	18	1	1	1	1	0	0	0	0
0055	234023	5224181	Nicolet	12	0	0	0	0	0	0	0	0
0056	226585	5219908	Nicolet	18.5	3	2	3	2	0	0	0	0

Sample	UTM		Township	Table	Total		Reshaped		Modified		Pristine	
KAP-	East	North		Feed (Kg)	R	N	R	N	R	N	R	N
0057	227791	5220857	Nicolet	13.6	0	0	0	0	0	0	0	0
0058	235231	5239531	Peever	17.2	2	2	2	2	0	0	0	0
0059	214004	5217883	(none)	14.3	0	0	0	0	0	0	0	0
0060	266234	5237558	Running	9.2	0	0	0	0	0	0	0	0
0061	266940	5237902	Running	8.5	0	0	0	0	0	0	0	0
0062	267379	5237933	Running	8.7	0	0	0	0	0	0	0	0
0063	265839	5238477	Running	8.2	1	2	1	2	0	0	0	0
0064	262870	5237560	Runnals	7.2	0	0	0	0	0	0	0	0
0065	262653	5237337	Runnals	10.5	0	0	0	0	0	0	0	0
0066	243401	5226959	Tolmonen	12.5	18	22	14	17	2	2	2	2
0067	250653	5230355	Tronsen	13.4	2	2	2	2	0	0	0	0
0068	258614	5227794	Vibert	10.4	1	1	1	1	0	0	0	0
0069	220730	5220964	Kincaid	14.6	0	0	0	0	0	0	0	0
0070	329091	5221248	Jessiman	7.9	0	0	0	0	0	0	0	0
0071	328737	5221036	Jessiman	12.1	1	1	1	1	0	0	0	0
0072	330352	5218625	Jessiman	15.6	0	0	0	0	0	0	0	0
0073	326868	5218534	Jessiman	11.9	0	0	0	0	0	0	0	0
0074	326506	5218262	Jessiman	14.4	1	1	1	1	0	0	0	0
0075	323006	5214393	Maeck	15.5	0	0	0	0	0	0	0	0
0076	326526	5231495	Foulds	9.7	0	0	0	0	0	0	0	0
0077	327082	5231119	Foulds	12.9	0	0	0	0	0	0	0	0
0078	327902	5227222	Foulds	13.1	0	0	0	0	0	0	0	0
0079	328574	5225039	Fouldsl	15.4	2	2	2	2	0	0	0	0
0080	319774	5225161	Ferrier	11.2	0	0	0	0	0	0	0	0
0081	321249	5222405	Havrot	15.1	0	0	0	0	0	0	0	0
0082	317538	5222681	Havrot	13.9	0	0	0	0	0	0	0	0
0083	315303	5221551	Havrot	11.9	0	0	0	0	0	0	0	0
0084	316087	5215580	Havrot	13.5	0	0	0	0	0	0	0	0
0085	315880	5211133	McNie	15.3	0	0	0	0	0	0	0	0
0086	316368	5208071	McNie	13.8	0	0	0	0	0	0	0	0
0087	281151	5217598	Gapp	14.3	1	1	1	1	0	0	0	0
0088	281647	5216103	Gapp	14	2	2	2	2	0	0	0	0
0089	277082	5213024	Lunkie	14.1	0	0	0	0	0	0	0	0
0090	276824	5210857	lunkie	11.3	1	1	1	1	0	0	0	0
0091	325699	5216907	Jessiman	10.6	0	0	0	0	0	0	0	0
0092	325393	5212868	Maeck	11.9	0	0	0	0	0	0	0	0
0093	322287	5217897	Havrot	4.7	0	0	0	0	0	0	0	0
0094	319315	5229563	Ferrier	16.4	2	2	2	2	0	0	0	0
0095	319376	5229705	Ferrier	17	1	1	1	1	0	0	0	0
0096	321379	5226799	Ferrier	14.35	0	0	0	0	0	0	0	0
0097	313556	5217818	Havrot	13.2	0	0	0	0	0	0	0	0
0098	315206	5215318	Havrot	12.1	1	1	1	1	0	0	0	0
0099	301684	5236675	Sherratt	13.2	0	0	0	0	0	0	0	0
0100	297826	5242522	Sherratt	9.5	0	0	0	0	0	0	0	0
0101	270145	5306086	Recollet	12.5	0	0	0	0	0	0	0	0
0102	270208	5305802	Recollet	15.1	0	0	0	0	0	0	0	0
0103	269935	5305586	Recollet	12.2	0	0	0	0	0	0	0	0
0104	256750	5279099	Beaudry	18.3	0	0	0	0	0	0	0	0
0105	255964	5279217	Beaudry	12.3	0	0	0	0	0	0	0	0
0106	256784	5276187	Beadry	16.1	0	0	0	0	0	0	0	0
0107	225556	5308816	Mitchipicoten	15.2	1	1	0	0	1	1	0	0
0118	245979	5307107	Noganosh	10	0	0	0	0	0	0	0	0
0119	241889	5302222	Roy	12.9	0	0	0	0	0	0	0	0

Sample	UTM		Township	Table	Total		Reshaped		Modified		Pristine	
KAP-	East	North		Feed (Kg)	R	N	R	N	R	N	R	N
0120	239929	5304582	Noganosh	16.7	0	0	0	0	0	0	0	0
0121	246679	5301665	Roy	9.7	0	0	0	0	0	0	0	0
0122	241082	5297830	Roy	13.1	0	0	0	0	0	0	0	0
0123	256623	5213747	Grenoble	9.1	0	0	0	0	0	0	0	0
0124	260803	5210597	Grenoble	13.9	1	1	1	1	0	0	0	0
0125	260839	5210518	Grenoble	7.8	1	2	1	2	0	0	0	0
0126	256851	5215261	Grenoble	11.7	4	5	4	5	0	0	0	0
0127	252135	5213916	Brule	6.9	1	2	1	2	0	0	0	0
0128	252344	5213229	Brule	8.1	0	0	0	0	0	0	0	0
0129	251358	5212452	Brule	6.4	3	7	3	7	0	0	0	0
0130	248264	5211419	Brule	7.7	0	0	0	0	0	0	0	0
0131	246566	5210584	Brule	8.7	1	2	1	2	0	0	0	0
0132	241342	5211172	Wishart	12.5	1	1	1	1	0	0	0	0
0133	242597	5213169	Wishart	9.3	1	2	0	0	1	2	0	0
0134	246382	5214440	Brule	11.3	2	3	2	3	0	0	0	0
0135	251177	5217671	Olsen	10.6	0	0	0	0	0	0	0	0
0136	252844	5230097	Tronsen	10.7	1	1	1	1	0	0	0	0
0137	253301	5230315	Tronsen	15.8	0	0	0	0	0	0	0	0
0138	251811	5231976	Tronsen	8.8	0	0	0	0	0	0	0	0
0139	247652	5228738	Tronsen	6.4	0	0	0	0	0	0	0	0
0140	239905	5225291	Norberg	8	1	2	1	2	0	0	0	0
0141	238758	5224798	Norberg	8.1	0	0	0	0	0	0	0	0
0142	237764	5222058	Norberg	5.6	2	5	2	5	0	0	0	0
0143	238176	5219409	Norberg	12.1	0	0	0	0	0	0	0	0
0144	237705	5218447	Norberg	16.3	1	1	0	0	1	1	0	0
0145	237620	5217019	Norberg	15.2	0	0	0	0	0	0	0	0
0146	235960	5215514	Wishert	8.8	3	5	3	5	0	0	0	0
0147	233405	5212692	Palmer	6.3	2	5	2	5	0	0	0	0
0148	233748	5212120	Palmer	9.5	9	14	8	13	0	0	1	2
0149	226350	5212015	Ryan	9.7	2	3	2	3	0	0	0	0
0150	254291	5218697	Olsen	13.8	1	1	1	1	0	0	0	0
0151	251641	5222312	Olsen	15.8	1	1	1	1	0	0	0	0
0152	253154	5218760	Olsen	13	0	0	0	0	0	0	0	0
0153	251645	5217010	Olsen	10.9	1	1	1	1	0	0	0	0
0154	219419	5212246	Kincaid	18.7	3	2	3	2	0	0	0	0
0155	219643	5215621	(none)	13.9	2	2	2	2	0	0	0	0
0156	379104	5206988	Parrott	5.1	0	0	0	0	0	0	0	0
0157	374564	5214079	McKeough	15.3	2	2	2	2	0	0	0	0
0158	364324	5206668	Nuttall	14.4	4	4	4	4	0	0	0	0
0159	362704	5210033	Nuttall	17.4	0	0	0	0	0	0	0	0
0160	362004	5210368	Nuttall	13.6	2	2	1	1	1	1	0	0
0161	379854	5213659	McKeough	8.9	1	2	1	2	0	0	0	0
0162	362204	5212869	Nuttall	10.1	1	1	1	1	0	0	0	0
0163	369804	5215219	Leluk	12.8	0	0	0	0	0	0	0	0
0164	360004	5213419	Morningstar	15.5	2	2	2	2	0	0	0	0
0165	318806	5208818	McNic	13	0	0	0	0	0	0	0	0
0166	322945	5211778	Maeck	11.9	0	0	0	0	0	0	0	0
0167	322330	5211588	McNic	14	1	1	1	1	0	0	0	0
0168	323355	5214238	Maeck	7.8	0	0	0	0	0	0	0	0
0169	275047	5240319	Schenbri	7.5	0	0	0	0	0	0	0	0
0170	268762	5232459	Way-White	13.8	0	0	0	0	0	0	0	0
0171	273907	5232038	Way-White	12.4	0	0	0	0	0	0	0	0
0172	271904	5234314	Running	15.1	0	0	0	0	0	0	0	0

Sample	UTM		Township	Table	Total		Reshaped		Modified		Pristine	
KAP-	East	North		Feed (Kg)	R	N	R	N	R	N	R	N
0173	284867	5216828	Gaudry	8.7	0	0	0	0	0	0	0	0
0174	283457	5217303	Gapp	10.3	0	0	0	0	0	0	0	0
0175	273501	5224848	Way-White	16.2	1	1	1	1	0	0	0	0
0176	286857	5233789	Bracci	11.2	0	0	0	0	0	0	0	0
0177	308292	5223275	Handleman	10.1	0	0	0	0	0	0	0	0
0178	302926	5218018	Handleman	10.3	0	0	0	0	0	0	0	0
0179	335645	5230009	Gaunt	13.7	0	0	0	0	0	0	0	0
0180	336968	5225335	Gaunt	7.7	0	0	0	0	0	0	0	0
0181	344042	5214384	Laughren	13	0	0	0	0	0	0	0	0
0182	359032	5216367	Lawlor	13.4	0	0	0	0	0	0	0	0
0183	346874	5226015	Gilbertson	14.3	1	1	1	1	0	0	0	0
0184	345855	5226169	Gilbertson	13	0	0	0	0	0	0	0	0
0185	341628	5223040	Lanc	16.5	3	3	3	3	0	0	0	0
0186	341305	5223069	Lanc	12	2	3	2	3	0	0	0	0
0187	333844	5250294	Birch	12.3	1	1	1	1	0	0	0	0
0188	331511	5253010	Hutcheon	13.7	0	0	0	0	0	0	0	0
0189	355014	5264274	Neelands	14.4	5	5	5	5	0	0	0	0
0190	355453	5264832	Neelands	12.3	1	1	0	0	1	1	0	0
0191	357532	5267533	Neelands	9	0	0	0	0	0	0	0	0
0192	389228	5240694	Hubbard	11.2	0	0	0	0	0	0	0	0
0193	389061	5242775	Fonst	11.5	1	1	1	1	0	0	0	0
0194	392744	5251487	Fonst	13.1	5	6	5	6	0	0	0	0
0195	391003	5244159	Fonst	13.4	0	0	0	0	0	0	0	0
0196	318697	5311738	Marshall	11.3	4	5	4	5	0	0	0	0
0197	316328	5308968	Panet	8.4	0	0	0	0	0	0	0	0
0198	341519	5259194	Langlois	10	0	0	0	0	0	0	0	0
0199	342553	5259459	Lynch	9.6	1	2	1	2	0	0	0	0
0200	343865	5255274	Lynch	12.4	8	10	7	8	1	1	0	0
0201	282545	5241734	Shembri	13.7	0	0	0	0	0	0	0	0
0202	281477	5240256	Shembri	13	0	0	0	0	0	0	0	0
0203	295137	5229537	Butcher	14.1	0	0	0	0	0	0	0	0
0204	296961	5230160	Butcher	11.8	0	0	0	0	0	0	0	0
0205	298944	5226247	Butcher	13.4	0	0	0	0	0	0	0	0
0206	297176	5224032	Hoffman	15	0	0	0	0	0	0	0	0
0207	294879	5221802	Hoffman	9.7	0	0	0	0	0	0	0	0
0208	293265	5220387	Gaudry	9.1	0	0	0	0	0	0	0	0
0209	291249	5219801	Gaudry	12	1	1	1	1	0	0	0	0
0210	291045	5219800	Gaudry	12.5	0	0	0	0	0	0	0	0
0211	297996	5212218	Pine	12.7	0	0	0	0	0	0	0	0
0212	304388	5213824	McIlveen	10.9	0	0	0	0	0	0	0	0
0213	305806	5211068	McIlveen	8.7	0	0	0	0	0	0	0	0
0214	312480	5220120	Handleman	12	0	0	0	0	0	0	0	0
0215	288400	5217415	Gaudry	8	0	0	0	0	0	0	0	0
0216	286405	5225769	Bracci	10.3	0	0	0	0	0	0	0	0
0217	293125	5213318	Nahwegezhic	9.5	0	0	0	0	0	0	0	0
0218	297509	5209587	Pine	10.2	0	0	0	0	0	0	0	0
0219	312178	5219922	Handleman	16.1	0	0	0	0	0	0	0	0
0220	305804	5215307	McIlveen	10.2	0	0	0	0	0	0	0	0
0221	286172	5220517	Gaudry	10.1	0	0	0	0	0	0	0	0
0222	341533	5218454	Lane	16.3	1	1	1	1	0	0	0	0
0223	339864	5215249	Lane	16.7	2	2	2	2	0	0	0	0
0224	337506	5211860	Martel	12.8	0	0	0	0	0	0	0	0
0225	335351	5209043	Martel	15.2	5	5	4	4	1	1	0	0

Sample KAP-	UTM		Township	Table	Total		Reshaped		Modified		Pristine	
	East	North		Feed (Kg)	R	N	R	N	R	N	R	N
0226	366304	5276319	Kaplan	14.3	3	3	3	3	0	0	0	0
0227	368129	5275390	Kaplan	11	3	4	3	4	0	0	0	0
0228	369180	5271046	Wakami	11.7	10	13	7	9	3	4	0	0
0229	369096	5268574	Wakami	12.2	0	0	0	0	0	0	0	0
0230	328094	5237670	Cassidy	10.1	3	4	2	3	0	0	1	1
0231	333868	5237726	Deans	10.7	0	0	0	0	0	0	0	0
0232	323051	5245269	Beckett	10.3	0	0	0	0	0	0	0	0
0233	326805	5244596	Bernier	15.2	0	0	0	0	0	0	0	0
0234	327586	5243795	Bernier	12	0	0	0	0	0	0	0	0
0235	346240	5239191	Drea	14.7	0	0	0	0	0	0	0	0
0236	345385	5235708	Drea	12.2	1	1	1	1	0	0	0	0
0237	347490	5230363	Gilbertson	10.4	0	0	0	0	0	0	0	0
0238	346150	5232928	Gilbertson	13.6	1	1	1	1	0	0	0	0
0239	345615	5240699	Drea	11.4	4	5	4	5	0	0	0	0
0240	349233	5246297	Brownsall	8.7	0	0	0	0	0	0	0	0
0241	334488	5254880	Langlois	12.8	0	0	0	0	0	0	0	0
0242	321244	5258985	Whitehead	13.7	0	0	0	0	0	0	0	0
0243	324654	5253935	Hutcheon	13.6	1	1	1	1	0	0	0	0
0244	333327	5264407	Reany	13.3	0	0	0	0	0	0	0	0
0245	363069	5287231	Greenlaw	14.3	1	1	1	1	0	0	0	0
0246	365391	5285480	Greenlaw	11.9	0	0	0	0	0	0	0	0
0247	366100	5283213	Greenlaw	11.4	0	0	0	0	0	0	0	0
0248	359135	5286436	Tooms	12.6	0	0	0	0	0	0	0	0
0249	358431	5275219	Eisenhower	7.4	0	0	0	0	0	0	0	0
0250	350869	5278761	Eisenhower	10.6	1	1	1	1	0	0	0	0
0252	354939	5312981	Sandy	11.8	0	0	0	0	0	0	0	0
0253	341926	5299642	McNaught	11.4	3	4	3	4	0	0	0	0
0254	322006	5294940	Chapleau	9.9	0	0	0	0	0	0	0	0
0255	372614	5284142	Cunningham	10	0	0	0	0	0	0	0	0
0256	363148	5281770	Greenlaw	9.4	0	0	0	0	0	0	0	0
0257	354722	5287353	Tooms	12.6	2	2	2	2	0	0	0	0
0258	353205	5281813	Tooms	10.2	0	0	0	0	0	0	0	0
0259	320637	5291689	Chappise	13	0	0	0	0	0	0	0	0
0260	357110	5260273	Kelsey	14.8	2	2	2	2	0	0	0	0
0261	355604	5257819	Kelsey	12.7	0	0	0	0	0	0	0	0
0262	342746	5262806	Storm	13.6	0	0	0	0	0	0	0	0
0263	327821	5268713	Kalen	11.1	0	0	0	0	0	0	0	0
0264	307487	5257300	Vondette	15.7	0	0	0	0	0	0	0	0
0265	306194	5255999	Vondette	17	0	0	0	0	0	0	0	0
0266	302216	5263774	Genier	13.9	0	0	0	0	0	0	0	0
0267	302482	5269356	Genier	11.9	0	0	0	0	0	0	0	0
0268	285965	5298357	Topham	10.4	0	0	0	0	0	0	0	0
0269	301006	5302319	Hoey	9.6	0	0	0	0	0	0	0	0
0270	256275	5295686	Sampson	11.7	0	0	0	0	0	0	0	0
0271	253793	5302084	Sampson	8.7	0	0	0	0	0	0	0	0
0272	266454	5297799	Saunders	14.6	0	0	0	0	0	0	0	0
0273	273830	5283868	Wawia	13	0	0	0	0	0	0	0	0
0274	260111	5274092	Beaupalant	10.5	0	0	0	0	0	0	0	0
0275	261935	5267247	Eaket	14.1	0	0	0	0	0	0	0	0
0276	269795	5274627	Behmann	17.3	0	0	0	0	0	0	0	0
0278	278812	5312910	Cosens	11.3	0	0	0	0	0	0	0	0
0301	344985	5252731	Bonnsall	11.7	0	0	0	0	0	0	0	0
0302	381052	5267685	Hong Kong	11.9	0	0	0	0	0	0	0	0

Sample	UTM		Township	Table	Total		Reshaped		Modified		Pristine	
KAP-	East	North		Feed (Kg)	R	N	R	N	R	N	R	N
0303	384717	5280694	Fawn	9.5	0	0	0	0	0	0	0	0
0304	379372	5275390	Blamey	8.8	0	0	0	0	0	0	0	0
0305	419258	5257641	Smuts	17.1	2	2	2	2	0	0	0	0
0306	408809	5261692	Arbutus	13.1	2	2	2	2	0	0	0	0
0307	400915	5256280	Carew	12.8	0	0	0	0	0	0	0	0
0308	397729	5257994	Cavell	13.8	19	21	17	18	0	0	2	2
0309	415337	5243263	Hollinger	10.7	0	0	0	0	0	0	0	0
0310	413756	5240980	Margaret	16.3	1	1	1	1	0	0	0	0
0311	329574	5315695	D'arcy	8.4	4	7	4	7	0	0	0	0
0313	341405	5305791	Borden	10.9	0	0	0	0	0	0	0	0
0314	348960	5295181	Lockner	13	0	0	0	0	0	0	0	0
0315	374246	5281616	Cunningham	12.9	1	1	1	1	0	0	0	0
0316	365924	5279907	Kaplan	9.3	0	0	0	0	0	0	0	0
0317	361196	5279610	Kaplan	12.6	3	4	2	2	0	0	1	1
0318	359523	5296721	Halcrow	14.8	0	0	0	0	0	0	0	0
0319	344925	5279428	DeGaulle	10.2	0	0	0	0	0	0	0	0
0320	316658	5304129	Panet	11.5	1	1	1	1	0	0	0	0
0321	320785	5304882	Panet	10.4	0	0	0	0	0	0	0	0
0322	356747	5254722	Kelsey	7.7	0	0	0	0	0	0	0	0
0323	352420	5257458	Kelsey	11.7	0	0	0	0	0	0	0	0
0324	340140	5267109	Storm	11.3	1	1	1	1	0	0	0	0
0325	324820	5256668	Hutcheon	13.9	9	10	9	10	0	0	0	0
0326	306772	5251318	Patenande	12.7	0	0	0	0	0	0	0	0
0327	303343	5256839	Kosny	8.2	0	0	0	0	0	0	0	0
0328	312253	5271495	Jeffries	16.3	0	0	0	0	0	0	0	0
0329	297203	5271097	Genier	10	5	8	5	8	0	0	0	0
0330	298270	5295568	Hoey	13.1	0	0	0	0	0	0	0	0
0331	303846	5296417	Caouette	14.55	0	0	0	0	0	0	0	0
0332	253643	5294878	Sampson	10.1	0	0	0	0	0	0	0	0
0333	256694	5299236	Sampson	9.5	1	2	1	2	0	0	0	0
0334	259500	5301217	Saunders	15.3	0	0	0	0	0	0	0	0
0335	269779	5296183	Shawkence	8.5	0	0	0	0	0	0	0	0
0336	263071	5276857	Beauparlant	7.7	0	0	0	0	0	0	0	0
0337	263739	5272776	Eaket	14	0	0	0	0	0	0	0	0
0338	265851	5270685	Eaket	8.5	0	0	0	0	0	0	0	0
0340	279005	5316015	D'Avaugour	13.1	0	0	0	0	0	0	0	0
0434	326238	5285642	Daoust	13.4	0	0	0	0	0	0	0	0
0435	326751	5284785	Daoust	12.9	0	0	0	0	0	0	0	0
0436	302421	5281520	Bordeleau	11.8	0	0	0	0	0	0	0	0
0437	300881	5288136	Dalmas	8.7	0	0	0	0	0	0	0	0
0438	295748	5290618	Dalmas	8.1	0	0	0	0	0	0	0	0
0439	291777	5287145	Crepieul	12.9	1	1	1	1	0	0	0	0
0440	294792	5288131	Crepieul	12.7	0	0	0	0	0	0	0	0
0441	289014	5284933	Wendigo	17	0	0	0	0	0	0	0	0
0442	288384	5285407	Wendigo	15.9	0	0	0	0	0	0	0	0
0443	298644	5278607	Bordeleau	12.7	0	0	0	0	0	0	0	0
0444	298665	5277094	Bordeleau	12.8	0	0	0	0	0	0	0	0
0445	295691	5274024	Bordeleau	13.9	0	0	0	0	0	0	0	0
0446	300109	5281249	Bordeleau	16.9	0	0	0	0	0	0	0	0
0447	307817	5270332	Green	17.5	0	0	0	0	0	0	0	0
0448	307392	5268850	Green	20.5	0	0	0	0	0	0	0	0
0449	296947	5267471	Genier	16.5	0	0	0	0	0	0	0	0
0450	297991	5273960	Bordeleau	15.9	0	0	0	0	0	0	0	0

Sample	UTM		Township	Table	Total		Reshaped		Modified		Pristine	
KAP-	East	North		Feed (Kg)	R	N	R	N	R	N	R	N
0475	284606	5288670	Windego	11.8	0	0	0	0	0	0	0	0
0476	278709	5298703	Topham	13.3	0	0	0	0	0	0	0	0
0477	297314	5300635	Hoey	12.4	0	0	0	0	0	0	0	0
0478	312068	5299951	Caouette	16.2	0	0	0	0	0	0	0	0
0479	278340	5245634	Moen	13.8	0	0	0	0	0	0	0	0
0480	278018	5246027	Moen	11.7	0	0	0	0	0	0	0	0
0481	281114	5245797	Moen	11.9	0	0	0	0	0	0	0	0
0482	282246	5245526	Moen	19.3	0	0	0	0	0	0	0	0
0483	283095	5245934	Moen	12	0	0	0	0	0	0	0	0
0484	284765	5246214	Moen	16.9	0	0	0	0	0	0	0	0
0485	288169	5246390	Moen	18.8	0	0	0	0	0	0	0	0
0486	290204	5244355	Scriven	15	0	0	0	0	0	0	0	0
0487	294845	5252282	Kosny	12.5	0	0	0	0	0	0	0	0
0488	297271	5252342	Neill	17.4	0	0	0	0	0	0	0	0
0489	299114	5245981	Neill	19.2	0	0	0	0	0	0	0	0
0490	287851	5244709	Moggy	15.5	0	0	0	0	0	0	0	0
0491	296825	5253109	Neill	21.5	0	0	0	0	0	0	0	0
0492	292674	5252599	Moggy	12	0	0	0	0	0	0	0	0
0493	285073	5250418	Moen	17.3	0	0	0	0	0	0	0	0
0494	283006	5252573	Moen	16	0	0	0	0	0	0	0	0
0495	283408	5252126	Moen	16.9	0	0	0	0	0	0	0	0
0496	273601	5263160	Hallett	15.6	0	0	0	0	0	0	0	0
0497	279718	5254780	Hammond	15.8	0	0	0	0	0	0	0	0
0498	281162	5271787	Engstorm	17	1	1	1	1	0	0	0	0
0499	279840	5271037	Engstorm	15.8	0	0	0	0	0	0	0	0
0500	278935	5270338	Engstorm	16.7	0	0	0	0	0	0	0	0
0514	300562	5314812	Bliss	11	0	0	0	0	0	0	0	0
0515	304459	5315503	Hill	12.5	0	0	0	0	0	0	0	0
0524	355553	5301835	Crockett	13	0	0	0	0	0	0	0	0
0525	357004	5305196	Crockett	15	0	0	0	0	0	0	0	0
0526	363750	5306190	Raney	8.4	0	0	0	0	0	0	0	0
0527	364628	5309661	Raney	6.8	0	0	0	0	0	0	0	0
0528	277129	5301944	Shawkence	12.9	0	0	0	0	0	0	0	0
0529	281507	5301669	Topham	18.9	0	0	0	0	0	0	0	0
0530	280524	5302403	Topham	18.9	0	0	0	0	0	0	0	0
0531	278551	5296422	Topham	17.3	0	0	0	0	0	0	0	0
0532	279729	5298709	Topham	16.1	1	1	1	1	0	0	0	0
0535	317695	5308851	Panet	17.4	1	1	1	1	0	0	0	0
0536	295382	5287976	Crepieul	16	0	0	0	0	0	0	0	0
0537	288086	5281790	Blackburn	15.2	0	0	0	0	0	0	0	0
0538	289375	5280654	Blackburn	20.3	0	0	0	0	0	0	0	0
0539	291857	5280670	Blackburn	18.4	1	1	1	1	0	0	0	0
0540	291684	5282318	Crepieul	18.1	0	0	0	0	0	0	0	0
0541	346241	5314714	Chewett	12.1	0	0	0	0	0	0	0	0
0542	346023	5311412	Chewett	16.4	0	0	0	0	0	0	0	0
0543	342535	5311972	Chewett	19.4	0	0	0	0	0	0	0	0
0544	335334	5309483	Borden	14.4	0	0	0	0	0	0	0	0
0545	282195	5274321	Beilhartz	15.9	0	0	0	0	0	0	0	0
0546	283781	5273910	Beilhartz	19.3	0	0	0	0	0	0	0	0
0547	293108	5271965	Fitzsimmons	17.1	0	0	0	0	0	0	0	0
0548	289225	5271989	Fitzsimmons	17.4	0	0	0	0	0	0	0	0
0549	294595	5284082	Crepieul	16.9	0	0	0	0	0	0	0	0
0550	299406	5277789	Bordeleau	16.8	0	0	0	0	0	0	0	0

Sample KAP-	UTM East	UTM North	Township	Table Feed (Kg)	Total R	Total N	Reshaped R	Reshaped N	Modified R	Modified N	Pristine R	Pristine N
0551	288607	5288869	Windego	15.5	0	0	0	0	0	0	0	0
0552	287714	5284604	Crepieul	17	0	0	0	0	0	0	0	0
0553	313594	5270547	Jeffries	16	0	0	0	0	0	0	0	0
0554	315992	5271208	Jeffries	17.2	0	0	0	0	0	0	0	0
0555	318373	5272915	Jeffries	18.1	0	0	0	0	0	0	0	0
0556	325782	5272744	Dupuis	14.2	0	0	0	0	0	0	0	0
0558	343272	5281634	DeGaulle	17.5	3	3	3	3	0	0	0	0
0559	342635	5281070	DeGaulle	17.3	1	1	1	1	0	0	0	0
0560	328664	5288501	Daoust	17.6	1	1	1	1	0	0	0	0
0561	346987	5292360	Lackner	19.8	6	5	6	5	0	0	0	0
0562	343251	5291606	Lackner	19.9	4	3	4	3	0	0	0	0
0566	335198	5288363	Halsey	16.9	3	3	2	2	1	1	0	0
0567	346153	5297835	Lackner	10.8	0	0	0	0	0	0	0	0
0568	346233	5300419	Lackner	18.3	0	0	0	0	0	0	0	0
0569	340831	5304119	Borden	13.3	0	0	0	0	0	0	0	0
0570	339976	5297403	McNaught	19.2	4	3	3	2	1	1	0	0
0574	333243	5296458	McNaught	16.2	0	0	0	0	0	0	0	0
0575	337034	5291500	Halsey	15.9	0	0	0	0	0	0	0	0
0576	332248	5308026	Cochrane	21.6	0	0	0	0	0	0	0	0
0577	335054	5307260	Borden	17.9	0	0	0	0	0	0	0	0
0578	325153	5307393	Cochrane	15.4	0	0	0	0	0	0	0	0
0589	357945	5317397	Sandy	15.2	0	0	0	0	0	0	0	0
0598	378168	5291244	Swayze	3.4	0	0	0	0	0	0	0	0
0599	375804	5289835	Cunningham	18.1	0	0	0	0	0	0	0	0
0600	379186	5292716	Swayze	18.6	1	1	1	1	0	0	0	0
0601	275858	5267776	Emiry	17.8	0	0	0	0	0	0	0	0
0602	274321	5262692	Hallett	15.7	0	0	0	0	0	0	0	0
0603	355398	5293337	Halcrow	19.6	0	0	0	0	0	0	0	0
0604	355442	5291731	Halcrow	12.5	0	0	0	0	0	0	0	0
0605	359255	5293619	Halcrow	12.9	0	0	0	0	0	0	0	0
0606	376566	5300893	Rollo	15	0	0	0	0	0	0	0	0
0607	381071	5308495	Coppell	14.7	0	0	0	0	0	0	0	0
0630	342870	5314526	Chewett	12.7	0	0	0	0	0	0	0	0
0631	341677	5316547	McGee	16.5	0	0	0	0	0	0	0	0
0635	344045	5317398	Chewett	10.5	0	0	0	0	0	0	0	0
0636	343843	5316019	Chewett	10.8	0	0	0	0	0	0	0	0
0655	377986	5312462	Biggs	13.9	0	0	0	0	0	0	0	0
0701	382649	5291483	Dore	7.6	0	0	0	0	0	0	0	0
0711	368666	5317560	Hellyer	15	0	0	0	0	0	0	0	0
0712	366742	5315222	Hellyer	15.4	0	0	0	0	0	0	0	0
0715	370210	5308104	Raney	9	0	0	0	0	0	0	0	0
0716	367621	5306515	Raney	7.8	0	0	0	0	0	0	0	0
0717	377281	5308601	Rollo	11.8	0	0	0	0	0	0	0	0
0718	381990	5310344	Whigham	17	0	0	0	0	0	0	0	0
0719	382584	5305277	Coppel	9.8	0	0	0	0	0	0	0	0
0790	293585	5303206	Peters	17.9	0	0	0	0	0	0	0	0
0939	378841	5254085	Singapore	18.1	0	0	0	0	0	0	0	0
0940	373798	5251360	Burr	14.4	0	0	0	0	0	0	0	0
0941	373783	5251426	Burr	18.9	11	9	11	9	0	0	0	0
0951	373075	5234837	Edighoffer	12.9	0	0	0	0	0	0	0	0
0952	368153	5232816	Grossman	18.8	0	0	0	0	0	0	0	0
0953	362796	5234778	Eaton	20.5	0	0	0	0	0	0	0	0
0954	365204	5230719	Grossman	18.3	0	0	0	0	0	0	0	0

Sample KAP-	UTM		Township	Table Feed (Kg)	Total		Reshaped		Modified		Pristine	
	East	North			R	N	R	N	R	N	R	N
0955	351988	5229069	Gisborn	22.7	0	0	0	0	0	0	0	0
0956	356659	5221727	Lawlor	14.3	0	0	0	0	0	0	0	0
0957	359639	5219301	Lawlor	16.7	0	0	0	0	0	0	0	0
0958	362965	5226347	Grossman	18.8	0	0	0	0	0	0	0	0
0959	379104	5227588	Guindon	12.9	0	0	0	0	0	0	0	0
0960	377729	5221726	McKeough	16.4	0	0	0	0	0	0	0	0
0961	364409	5223872	Grossman	15.3	0	0	0	0	0	0	0	0
0962	366005	5217808	Leluk	19.2	0	0	0	0	0	0	0	0
0963	364604	5214809	Leluk	19.2	1	1	1	1	0	0	0	0
0964	352500	5207909	Morningstar	18.5	0	0	0	0	0	0	0	0
0965	343826	5211172	Meen	13.2	0	0	0	0	0	0	0	0
0966	333388	5218977	Lang	11	0	0	0	0	0	0	0	0
0967	328780	5211751	Maeck	16.3	0	0	0	0	0	0	0	0
0968	382874	5252253	Ceylon	17.4	1	1	1	1	0	0	0	0
0969	376370	5253414	Singapore	11.7	1	1	0	0	1	1	0	0
0970	376366	5253288	Singapore	13.4	0	0	0	0	0	0	0	0
0971	379879	5244809	Burr	14.9	0	0	0	0	0	0	0	0
0972	371253	5241811	Eaton	8.1	0	0	0	0	0	0	0	0
0973	367104	5239055	Eaton	16	2	2	2	2	0	0	0	0
0974	365899	5241962	Eaton	10.6	0	0	0	0	0	0	0	0
0975	360527	5237849	Dukszta	15.4	0	0	0	0	0	0	0	0
0976	357689	5231688	Gisborn	14.1	0	0	0	0	0	0	0	0
0977	355848	5229435	Gisborn	14.6	0	0	0	0	0	0	0	0
0978	349559	5226746	Gilbertson	16.1	0	0	0	0	0	0	0	0
0979	355555	5215044	Lawlor	15.9	0	0	0	0	0	0	0	0
0980	361179	5222632	Lawlor	16.7	0	0	0	0	0	0	0	0
0981	337482	5220332	Lane	12.7	0	0	0	0	0	0	0	0
0982	338219	5214275	Martel	16.7	0	0	0	0	0	0	0	0
0983	337445	5240139	Deans	16.3	0	0	0	0	0	0	0	0
0984	323207	5249072	Beckett	12.4	0	0	0	0	0	0	0	0
0985	307647	5239788	Carton	15.3	0	0	0	0	0	0	0	0
0986	298334	5254754	Kosny	20.2	0	0	0	0	0	0	0	0
0987	301843	5256281	Kosny	11.6	0	0	0	0	0	0	0	0
0988	326911	5221491	Jessiman	18.5	0	0	0	0	0	0	0	0
0989	318227	5226249	Ferrier	13.8	0	0	0	0	0	0	0	0
0990	308931	5225123	Ewen	16.7	0	0	0	0	0	0	0	0
0991	299019	5221796	Hoffman	14.3	0	0	0	0	0	0	0	0
0992	320140	5237609	Carruthers	12.2	0	0	0	0	0	0	0	0
0993	315070	5238715	Carruthers	18.2	1	1	1	1	0	0	0	0
0994	316881	5243320	Carruthers	16.7	0	0	0	0	0	0	0	0
0995	289429	5251227	Moggy	9.9	0	0	0	0	0	0	0	0
0996	283774	5253113	Moen	17.4	0	0	0	0	0	0	0	0
0997	280473	5244815	Shembri	15.7	0	0	0	0	0	0	0	0
0998	272483	5240754	Running	13.8	1	1	1	1	0	0	0	0
0999	269389	5242017	Running	11.6	0	0	0	0	0	0	0	0
1000	270625	5216872	Desbiens	19	0	0	0	0	0	0	0	0
1001	423700	5257956	Smuts	7.5	0	0	0	0	0	0	0	0
1002	416912	5260986	Alcona	8.9	0	0	0	0	0	0	0	0
1003	385594	5273845	Fawn	8.5	0	0	0	0	0	0	0	0
1004	384295	5270784	Hong Kong	10.5	0	0	0	0	0	0	0	0
1005	381005	5273700	Fawn	7.9	0	0	0	0	0	0	0	0
1006	351376	5275437	Eisenhower	11.1	0	0	0	0	0	0	0	0
1007	334110	5256120	Langlois	9.1	0	0	0	0	0	0	0	0

Sample	UTM		Township	Table	Total		Reshaped		Modified		Pristine	
KAP-	East	North		Feed (Kg)	R	N	R	N	R	N	R	N
1008	337929	5260821	Langlois	8.6	0	0	0	0	0	0	0	0
1009	337815	5260949	Langlois	9.1	0	0	0	0	0	0	0	0
1010	333782	5270585	Reaney	10.2	0	0	0	0	0	0	0	0
1011	354690	5245579	Brathwaite	12	0	0	0	0	0	0	0	0
1012	351449	5236045	Drea	15	0	0	0	0	0	0	0	0
1013	324662	5273640	Dupuis	12.6	0	0	0	0	0	0	0	0
1014	320757	5301289	Chapleau	13.9	0	0	0	0	0	0	0	0
1015	309104	5265996	Green	11	0	0	0	0	0	0	0	0
1016	275917	5261260	Hallet	11.2	3	4	3	4	0	0	0	0
1017	284309	5261415	Hammond	13.6	0	0	0	0	0	0	0	0
1018	320068	5298598	Chapleau	14.1	0	0	0	0	0	0	0	0
1019	342710	5302396	Gamey	13.1	0	0	0	0	0	0	0	0
1020	293510	5301428	Peters	11.2	0	0	0	0	0	0	0	0
1021	269320	5289595	Wawia									
1022	262534	5286965	Waswa	14.3	0	0	0	0	0	0	0	0
1023	246104	5291256	Suganaqueb	9.3	0	0	0	0	0	0	0	0
1024	243410	5289480	Suganaqueb	12	0	0	0	0	0	0	0	0
1025	240801	5288094	Suganaqueb	12.2	0	0	0	0	0	0	0	0
1051	282623	5226447	Wlasy	12.9	0	0	0	0	0	0	0	0
1052	257795	5220464	Davieaux	7.8	0	0	0	0	0	0	0	0
1053	325661	5250243	Bernier	11.7	0	0	0	0	0	0	0	0
1054	313850	5241459	Carruthers	16.1	0	0	0	0	0	0	0	0
1055	300671	5249371	Neill	12.7	0	0	0	0	0	0	0	0
1056	300719	5249400	Neill	13.9	0	0	0	0	0	0	0	0
1057	294011	5244656	Moggy	15.3	0	0	0	0	0	0	0	0
1058	286326	5251748	Moggy	13.6	1	1	1	1	0	0	0	0
1059	285637	5244962	Moggy	8.9	0	0	0	0	0	0	0	0
1060	285570	5244848	Moggy	14.8	0	0	0	0	0	0	0	0
1061	275493	5244913	Shembri	14.4	0	0	0	0	0	0	0	0
1062	270668	5239994	Running	13.7	0	0	0	0	0	0	0	0
1063	270370	5238398	Running	16.6	0	0	0	0	0	0	0	0
1064	264960	5214149	Dablon	10.3	0	0	0	0	0	0	0	0
1065	260230	5235331	Runnalls	17	0	0	0	0	0	0	0	0
1066	257000	5232626	Vibert	16.3	0	0	0	0	0	0	0	0
1067	241993	5229698	Tolmonen	14.4	0	0	0	0	0	0	0	0
1068	239607	5229472	Tolmonen	15.5	0	0	0	0	0	0	0	0
1069	238097	5227950	Tolmonen	16.3	0	0	0	0	0	0	0	0
1070	244328	5282890	Beaudin	12.5	0	0	0	0	0	0	0	0
1071	240017	5280058	Beaudin	13.5	0	0	0	0	0	0	0	0
1072	247989	5278578	Beaudry	11.4	0	0	0	0	0	0	0	0
1073	250785	5274316	Beaudry	10.8	0	0	0	0	0	0	0	0
1074	246905	5272749	Cannard	7	0	0	0	0	0	0	0	0
1075	242712	5272608	Cannard	9.2	0	0	0	0	0	0	0	0
1076	239387	5272016	Cannard	13.7	0	0	0	0	0	0	0	0
1077	237632	5271639	Cannard	14	0	0	0	0	0	0	0	0
1078	237201	5265282	Bullock	18.4	0	0	0	0	0	0	0	0
1079	242112	5263547	Grootenboer	13.9	0	0	0	0	0	0	0	0
1080	237336	5259048	Grootenboer	16.5	0	0	0	0	0	0	0	0
1081	237825	5255442	Grootenboer	6.1	0	0	0	0	0	0	0	0
1082	237780	5255568	Grootenboer	18.3	0	0	0	0	0	0	0	0
1083	250475	5254429	Loach	8.7	0	0	0	0	0	0	0	0
1084	250427	5254358	Loach	17.3	0	0	0	0	0	0	0	0
1085	238223	5253617	Larson	15.6	0	0	0	0	0	0	0	0

Sample	UTM		Township	Table	Total		Reshaped		Modified		Pristine	
KAP-	East	North		Feed (Kg)	R	N	R	N	R	N	R	N
1086	236407	5252587	Larson	15.2	0	0	0	0	0	0	0	0
1087	244571	5282718	Beaudin	14.5	0	0	0	0	0	0	0	0
1088	241642	5277764	Beaudin	9.4	0	0	0	0	0	0	0	0
1089	247260	5274573	Beaudry	11	0	0	0	0	0	0	0	0
1090	252948	5273423	Corboy	16.6	0	0	0	0	0	0	0	0
1091	243154	5272619	Cannard	10.2	0	0	0	0	0	0	0	0
1092	241200	5272203	Cannard	17.2	0	0	0	0	0	0	0	0
1093	237498	5267779	Bullock	13.3	0	0	0	0	0	0	0	0
1094	237938	5264075	Grootenboer	11.9	0	0	0	0	0	0	0	0
1095	237967	5264033	Grootenboer	11.8	0	0	0	0	0	0	0	0
1096	241063	5258386	Grootenboer	12.3	0	0	0	0	0	0	0	0
1097	239971	5250076	Larson	10.2	0	0	0	0	0	0	0	0
1098	245943	5249848	Larson	14.3	0	0	0	0	0	0	0	0
1101	220992	5217512	Ryan	12	0	0	0	0	0	0	0	0
1102	269816	5255635	Hallett	12.6	0	0	0	0	0	0	0	0
1103	268568	5257245	Hallett	13.1	0	0	0	0	0	0	0	0
1104	265406	5252930	McAughey	10.8	0	0	0	0	0	0	0	0
1105	256084	5252273	Loach	12.3	0	0	0	0	0	0	0	0
1106	254269	5250570	Loach	8.5	0	0	0	0	0	0	0	0
1107	250013	5250281	Loach	13.7	0	0	0	0	0	0	0	0
1108	254957	5255436	Grzela	9.4	0	0	0	0	0	0	0	0
1109	250259	5263726	Grzela	8.7	0	0	0	0	0	0	0	0
1110	257789	5267300	Eaket	17.2	0	0	0	0	0	0	0	0
1111	262791	5265363	Eaket	14.5	0	0	0	0	0	0	0	0
1112	273526	5268761	Emiry	12.3	0	0	0	0	0	0	0	0
1113	269470	5276380	Behmann	17.3	0	0	0	0	0	0	0	0

APPENDIX H: Data Plotting Parameters: Sample Normalization Calculations.

1) Count estimate calculation (where applicable)

$$\text{Adjusted raw grain counts} = \frac{(\text{estimated number of grains})}{(\text{number of picked grains})} \times \text{ number of KIMs}$$

EXAMPLE

For sample KAP-0083, 23 Cr-diopside grains were picked from the concentrate out of an estimated 40 grains. Microprobe analysis confirmed that only 6 grains were KIM Cr-diopsides. The calculation is as follows:

$$\text{Adjusted raw grain counts} = \frac{(40)}{(23)} \times 6 \quad = \quad 10 \text{ grains}$$

2) Table weight feed normalization

$$\text{Number of normalized grains} = \frac{(15\text{ Kg})}{(\text{table weight feed})} \times \text{ number of KIMs}$$

EXAMPLE

For sample KAP-0083, the table weight feed was 11.9 Kg. Of the 23 picked Cr-diopside grains only 6 classified as KIMs. However, in this sample 23 grains were picked out of an estimated 40 grains. To normalize the adjusted raw grain count value to a table weight of 15 Kg the calculation is as follows:

$$\text{Number of normalized grains} = \frac{(15\text{ Kg})}{(11.9\text{ Kg})} \times 10 \quad = \quad 13 \text{ grains}$$

Metric Conversion Table

Conversion from SI to Imperial			**Conversion from Imperial to SI**		
SI Unit	*Multiplied by*	*Gives*	*Imperial Unit*	*Multiplied by*	*Gives*
			LENGTH		
1 mm	0.039 37	inches	1 inch	**25.4**	mm
1 cm	0.393 70	inches	1 inch	**2.54**	cm
1 m	3.280 84	feet	1 foot	**0.304 8**	m
1 m	0.049 709	chains	1 chain	20.116 8	m
1 km	0.621 371	miles (statute)	1 mile (statute)	**1.609 344**	km
			AREA		
1 cm^2	0.155 0	square inches	1 square inch	**6.451 6**	cm^2
1 m^2	10.763 9	square feet	1 square foot	**0.092 903 04**	m^2
1 km^2	0.386 10	square miles	1 square mile	2.589 988	km^2
1 ha	2.471 054	acres	1 acre	0.404 685 6	ha
			VOLUME		
1 cm^3	0.061 023	cubic inches	1 cubic inch	**16.387 064**	cm^3
1 m^3	35.314 7	cubic feet	1 cubic foot	0.028 316 85	m^3
1 m^3	1.307 951	cubic yards	1 cubic yard	0.764 554 86	m^3
			CAPACITY		
1 L	1.759 755	pints	1 pint	0.568 261	L
1 L	0.879 877	quarts	1 quart	1.136 522	L
1 L	0.219 969	gallons	1 gallon	**4.546 090**	L
			MASS		
1 g	0.035 273 962	ounces (avdp)	1 ounce (avdp)	28.349 523	g
1 g	0.032 150 747	ounces (troy)	1 ounce (troy)	**31.103 476 8**	g
1 kg	2.204 622 6	pounds (avdp)	1 pound (avdp)	**0.453 592 37**	kg
1 kg	0.001 102 3	tons (short)	1 ton (short)	**907.184 74**	kg
1 t	1.102 311 3	tons (short)	1 ton (short)	**0.907 184 74**	t
1 kg	0.000 984 21	tons (long)	1 ton (long)	**1016.046 908 8**	kg
1 t	0.984 206 5	tons (long)	1 ton (long)	**1.016 046 90**	t
			CONCENTRATION		
1 g/t	0.029 166 6	ounce (troy)/ ton (short)	1 ounce (troy)/ ton (short)	34.285 714 2	g/t
1 g/t	0.583 333 33	pennyweights/ ton (short)	1 pennyweight/ ton (short)	1.714 285 7	g/t

OTHER USEFUL CONVERSION FACTORS

	Multiplied by	
1 ounce (troy) per ton (short)	31.103 477	grams per ton (short)
1 gram per ton (short)	0.032 151	ounces (troy) per ton (short)
1 ounce (troy) per ton (short)	20.0	pennyweights per ton (short)
1 pennyweight per ton (short)	0.05	ounces (troy) per ton (short)

Note: Conversion factors which are in bold type are exact. The conversion factors have been taken from or have been derived from factors given in the Metric Practice Guide for the Canadian Mining and Metallurgical Industries, published by the Mining Association of Canada in co-operation with the Coal Association of Canada.